85-1710

Supreme Court, U.S.
FILED
APR 18 1986
JOSEPH F. SPANIOL, JR.
CLERK

No. 85-

IN THE

Supreme Court of the United States

OCTOBER TERM, 1985

MALLINCKRODT, INC.,
Petitioner,

v.

SAMUEL F. BENNETT, *et al.*,
Respondents.

PETITION FOR A WRIT OF CERTIORARI TO THE MISSOURI COURT OF APPEALS, EASTERN DISTRICT

Of Counsel:

WILLIAM A. RICHTER
LEWIS R. MILLS

PEPER, MARTIN, JENSEN,
MAICHEL & HETLAGE
720 Olive Street
St. Louis, Missouri 63101
(314) 421-3850

RAYMOND M. ASHER
ROGER A. KELLER

MALLINCKRODT, INC.
675 McDonnell Boulevard
St. Louis, Missouri 63134
(314) 895-2906

PETER J. NICKLES*
RICHARD A. MESERVE
WILLIAM F. GREANEY

COVINGTON & BURLING
1201 Pennsylvania Avenue, N.W.
P.O. Box 7566
Washington, D.C. 20044
(202) 662-6000

Attorneys for Petitioner
MALLINCKRODT, INC.

**Counsel of Record*

QUESTION PRESENTED

Whether a federally licensed radiopharmaceutical facility that is operated in full compliance with comprehensive radiological emission standards established by the Nuclear Regulatory Commission can, consistent with the federal preemption of the field of nuclear safety, be subjected to suits for monetary damages on the basis of the planned, periodic emissions of low-level radiation that occur in the normal course of operations.

PARTIES TO THE PROCEEDING

The petitioner herein is Mallinckrodt, Inc.* The parties to the proceedings below not listed in the caption of the case are Frank Fogerty, Vera J. Howell, Charles Wilkerson, Leonard Bodus, Lynn Carroll, Douglas Wesley and Owen Arney, appellants below.

---

* Petitioner is a wholly owned subsidiary of IMC Holdings, Inc., which itself is a subsidiary of International Minerals and Chemical Corp. Petitioner has the following non-wholly owned subsidiaries: Daiichi Radioisotope Laboratories, Ltd.; Mallinckrodt Iberia, S.A.; Bunnell, Inc.; and Orange Medical Instruments.

TABLE OF CONTENTS

	Page
QUESTION PRESENTED	i
PARTIES TO THE PROCEEDING	ii
TABLE OF AUTHORITIES	iv
OPINIONS BELOW	1
JURISDICTION	2
STATUTES AND REGULATIONS INVOLVED	2
STATEMENT OF THE CASE	3
REASONS FOR GRANTING THE PETITION	6
CONCLUSION	16
APPENDIX A	1a
APPENDIX B	29a
APPENDIX C	30a
APPENDIX D	31a
APPENDIX E	33a

TABLE OF AUTHORITIES

	Page
CASES:	
Chicago & North Western Transportation Co. v. Kalo Brick & Tile Co., 450 U.S. 311 (1981)	12
Cipollone v. *Liggett Group, Inc.*, No. 85-5073 (3d Cir. Apr. 7, 1986)	13
Cipollone v. *Liggett Group, Inc.*, 593 F. Supp. 1146 (D.N.J. 1984), *rev'd*, No. 85-5073 (3d Cir. Apr. 7, 1986)	13
Cox Broadcasting Corp. v. Cohn, 420 U.S. 469 (1975)	2
Fidelity Federal Savings & Loan Association v. de la Cuesta, 458 U.S 141 (1982)	12
Johnston v. United States, 597 F. Supp. 374 (D. Kan. 1984)	5
McKay v. United States, 703 F.2d 464 (10th Cir. 1983)	8
Miami Herald Publishing Co. v. Tornillo, 418 U.S. 241 (1974)	2
Pacific Gas & Electric Co. v. State Energy Resources Conservation and Development Commission, 461 U.S. 190 (1983)	7,14
San Diego Building Trades Council v. Garmon, 359 U.S. 236 (1959)	7,12
Silkwood v. Kerr-McGee Corp., 464 U.S. 238 (1984)	4, *passim*
Silkwood v. Kerr-McGee Corp., 667 F.2d 908 (10th Cir. 1981), *rev'd on other grounds*, 464 U.S. 238 (1984)	8
Train v. Colorado Public Interest Research Group, 426 U.S. 1 (1976)	7
STATUTES:	
Atomic Energy Act of 1954,	
42 U.S.C. § 2011 *et seq.*	2, *passim*
42 U.S.C. § 2014(e)	5
42 U.S.C. § 2111	5
42 U.S.C. §§ 2271-2284	6
Price-Anderson Act,	
42 U.S.C. § 2210 *et seq.*	8, *passim*

Page

LEGISLATIVE MATERIALS:

S. Rep. No. 454, 94th Cong., 1st Sess., *reprinted in* 1975 U.S. Code Cong. & Ad. News 2251 10

H.R. Rep. No. 1115, 93d Cong., 2d Sess. (1974) 10

S. Rep. No. 296, 85th Cong., 1st Sess., *reprinted in* 1957 U.S. Code Cong. & Ad. News 1803 9

103 Cong. Rec. 10715 (1957) 10

103 Cong. Rec. 10714 (1957) 10

103 Cong. Rec. 10712 (1957) 10

103 Cong. Rec. 10711 (1957) 10

103 Cong. Rec. 5046 (1957) 10

ADMINISTRATIVE REGULATIONS:

10 C.F.R. Parts 0-170 5

10 C.F.R. Part 20 ..... 2, *passim*

10 C.F.R. § 20.101-.106 and App. B 5

10 C.F.R. § 2.201-.206 6

10 C.F.R. § 2.202(f) 6

10 C.F.R. § 30.33-.34 6

MISCELLANEOUS:

International Comm'n on Radiation Protection, *Recommendations of the International Comm'n on Radiological Protection* (Report No. 26) (1977) 5

American Medical Ass'n, *Risks of Nuclear Energy and Low-Level Ionizing Radiation* (1981) 5

Nat'l Council on Radiation Protection and Measurements, *Basic Radiation Protection Criteria* (Report No. 39) (1971) 5

Nat'l Research Council, Comm. on the Biological Effects of Ionizing Radiation, *The Effects on Populations of Exposure to Low Levels of Ionizing Radiation: 1980* (1980) 4

IN THE

Supreme Court of the United States

OCTOBER TERM, 1985

No. 85-

MALLINCKRODT, INC.,
Petitioner,

v.

SAMUEL F. BENNETT, *et al.*,
Respondents.

PETITION FOR A WRIT OF CERTIORARI TO THE MISSOURI COURT OF APPEALS, EASTERN DISTRICT

Mallinckrodt, Inc. ("Mallinckrodt") petitions this Court for a writ of certiorari to review the judgment of the Missouri Court of Appeals, Eastern District, in this proceeding.

OPINIONS BELOW

The opinion of the Missouri Court of Appeals and its order denying petitioner's motion for rehearing or, in the alternative, for transfer to the Supreme Court of Missouri are reported at 698 S.W.2d 854. App. A, *infra*. The order of the Supreme Court of Missouri denying petitioner's motion for transfer (App. B, *infra*) is not reported. The decision of the trial court (App. C, *infra*) also is not reported.

JURISDICTION

The judgment of the Missouri Court of Appeals was entered on July 16, 1985. A motion for rehearing or, in the alternative, for transfer to the Supreme Court of Missouri was denied by the court of appeals on September 26, 1985. App. A, *infra*, at 27a. A motion for transfer was denied by the Supreme Court of Missouri on November 21, 1985. App. B, *infra*. On February 12, 1986, Justice Blackmun entered an order extending the time for filing a petition for a writ of certiorari to April 19, 1986. The jurisdiction of this Court is invoked pursuant to 28 U.S.C. § 1257(3).[1]

STATUTES AND REGULATIONS INVOLVED

Relevant portions of the Atomic Energy Act of 1954, Pub. L. No. 83-703, 68 Stat. 919, as amended, 42 U.S.C. § 2011 *et seq.* (1982 & Supp. II 1984) are reprinted in App. D, *infra*. Relevant portions of the Act's implementing regulations promulgated by the Nuclear Regulatory Commission ("NRC") and its predecessor, the Atomic Energy Commission ("AEC"), are reprinted in App. E, *infra*, and are codified at 10 C.F.R. Part 20 (1985).

---

[1] Although this case has been remanded for further proceedings in the trial court, the holding of the court of appeals that respondents' suit is not preempted by federal law constitutes a conclusive determination of a dispositive federal issue by the Missouri courts. No other federal issues remain to be decided. It is well established that where a federal issue has been finally decided by the appellate courts of a State, and where reversal of the state court on the federal issue would both obviate the need for further litigation and prevent the erosion of an important federal policy, the judgment or decree of the state court is considered "final" for purposes of 28 U.S.C. § 1257. *See, e.g.*, Cox Broadcasting Corp. v. Cohn, 420 U.S. 469, 476-487 (1975); Miami Herald Publishing Co. v. Tornillo, 418 U.S. 241 (1974). Because the Missouri court's decision on the federal preemption issue will, if allowed to stand, have a serious adverse impact on important federal policies established in the Atomic Energy Act, it is ripe for review in this Court.

STATEMENT OF THE CASE

This case originated as a class action lawsuit filed in the Circuit Court of St. Louis County, Missouri. The named plaintiffs (respondents herein) purport to represent a class of persons who have worked or will work in the vicinity of a radiopharmaceutical processing plant operated by Mallinckrodt in Maryland Heights, Missouri. In their petition, respondents seek compensatory and punitive damages of $1 billion and broad injunctive relief,[2] on the ground that low-level radiation emitted by Mallinckrodt's plant in the normal course of operations allegedly presents a health hazard. Respondents assert common-law tort theories of negligence, assault and battery, and "ultrahazardous activities."

A. The Proceedings Below

Mallinckrodt moved the trial court to dismiss respondents' petition,[3] contending, *inter alia*, that the suit was preempted by the comprehensive and exclusive scheme of federal regulation of Mallinckrodt's radiopharmaceutical operations under the Atomic Energy Act of 1954, as amended, 42 U.S.C. § 2011 *et seq.* On August 18, 1983, the trial court dismissed the suit on the grounds that the court lacked subject matter jurisdiction and that the petition failed to state a claim upon which relief could be granted. App. C, *infra*. Respondents thereafter appealed the dismissal to the Missouri Court of Appeals, Eastern District.

On appeal, Mallinckrodt argued that tort recovery was preempted because of the comprehensive federal regulatory control of nuclear safety. Respondents' petition contained no allegation that they had sustained any injury as a result of a "nuclear incident" — a significant accidental release of radiation that exceeded the federal exposure and emission limits applicable to Mallinckrodt's plant. Moreover, Mallinckrodt argued that permitting the case to proceed when no violation had been alleged of federal exposure and emission standards

---

[2] In particular, respondents seek an injunction requiring Mallinckrodt to cease its radiopharmaceutical operations and to provide free medical care to the members of the alleged class.

[3] The document that would constitute a complaint in a federal court is termed a "petition" in the Missouri courts.

would create an irreconcilable conflict between federal and state regulatory standards and would frustrate the developmental objectives of the Atomic Energy Act.

On July 16, 1985, the Missouri Court of Appeals issued an opinion reversing the trial court's dismissal of the petition. App. A, *infra*, at 1a-26a. The court agreed with Mallinckrodt's contention that injunctive relief against a federally licensed nuclear facility was barred by the doctrine of federal preemption. *Id.* at 26a. However, the court concluded that respondents' claims for damages were not barred even if Mallinckrodt's plant was operated in full compliance with federal safety requirements. *Id.* at 2a-14a. The Missouri court purported to derive its conclusions from this Court's decision in *Silkwood* v. *Kerr-McGee Corp.*, 464 U.S. 238 (1984), which held that a common-law award of punitive damages against the operator of a nuclear facility for property damage caused by the accidental escape of radioactive material was not preempted by federal law.

Mallinckrodt sought rehearing on the federal preemption issues before the court of appeals. The motion for rehearing or, alternatively, for transfer to the Supreme Court of Missouri was denied in a brief order. App. A, *infra*, at 27a. A subsequent motion for transfer was summarily denied by the Supreme Court of Missouri. App. B, *infra*.

B. The Comprehensive Framework of Federal Safety Regulations Governing Mallinckrodt's Operations

Mallinckrodt's plant is engaged in the production of various radiopharmaceuticals for use in the practice of nuclear medicine. Radiopharmaceuticals are diagnostic and therapeutic agents containing radioisotopes that are injected into the body under the supervision of licensed physicians trained in nuclear medicine. Over 10,000 physicians are licensed to administer radiopharmaceuticals to patients in the United States, and at least 10-12 million doses are administered each year.[4]

---

[4] *See* Nat'l Research Council, Comm. on the Biological Effects of Ionizing Radiation, *The Effects on Populations of Exposure to Low Levels of Ionizing Radiation: 1980* 47-49 (1980).

The radioisotopes processed at Mallinckrodt's plant constitute "byproduct material," a nuclear material specifically regulated under the Atomic Energy Act. *See* 42 U.S.C. §§ 2014(e), 2111. Mallinckrodt is therefore required to maintain an operating license from the NRC, and its plant is subject to an array of federal regulations governing matters of nuclear safety.

The NRC and its predecessor, the AEC, have promulgated extensive regulations establishing detailed standards to protect the public from any radiation hazards that could result from the operation of nuclear facilities. *See, e.g.*, 10 C.F.R. Part 20 (1985).[5] Of particular relevance here, these comprehensive safety regulations include strict limitations on permissible exposures to radiation for both workers and the general public, and specify maximum permissible concentrations of some 400 different radionuclides (including those commonly utilized in nuclear medicine) in air or water in "restricted" (i.e., on-site) areas and in releases to "unrestricted" (i.e., public or off-site) areas. *See* 10 C.F.R. § 20.101-.106 and App. B (1985) (App. E, *infra*). These basic federal emission and exposure standards have been set far below the level at which adverse health effects have ever been observed.[6]

---

[5] The provisions of Part 20 fit within a broader regulatory framework governing the possession, use, processing, storage, transfer, packaging and disposal of nuclear materials. *See* 10 C.F.R. Parts 0-170 (1985).

[6] *See, e.g.*, Johnston v. United States, 597 F.Supp. 374, 390-392, 423 (D. Kan. 1984) (expert medical and scientific testimony establishes that the only evidence of a carcinogenic effect from exposure to radiation occurs at levels of exposure roughly 100-200 times greater than the annual NRC exposure limit for members of the general public); *see also id.* at 377.

The NRC standards are fully consistent with the radiation protection recommendations of major medical and health physics organizations, including the International Commission on Radiation Protection ("ICRP"), the National Council on Radiation Protection and Measurements ("NCRP") and the American Medical Association ("AMA"). *See* ICRP, *Recommendations of the International Comm'n on Radiological Protection* (Report No. 26) (1977); NCRP, *Basic Radiation Protection Criteria* (Report No. 39) (1971); AMA, *Risks of Nuclear Energy and Low-Level Ionizing Radiation* 27 (1981).

Mallinckrodt must conform to these NRC standards in order to continue to operate. Moreover, it must conduct its operations under the terms of an NRC license that imposes additional conditions on the possession, use, storage and disposal of its radiopharmaceutical products. *See* 10 C.F.R. § 30.33-.34. The NRC conducts regular inspections of Mallinckrodt's plant to assure compliance with safety regulations and licensing requirements.

Violations of the Atomic Energy Act, the implementing regulations, or the license conditions can lead to the imposition of severe civil and criminal fines and other penalties. *See* 42 U.S.C. §§ 2271-2284. In addition, the NRC has been authorized to initiate proceedings to modify, suspend or even revoke any license issued under the Act. 10 C.F.R. § 2.201-.206. In an appropriate emergency, any such proposed action becomes effective immediately. *Id.* § 2.202(f).

REASONS FOR GRANTING THE PETITION

This case presents a legal issue of profound importance in defining the appropriate role of federal and state authority in the nuclear energy field: whether a licensed nuclear facility operated in full compliance with comprehensive federal safety standards can be liable under state tort law for the planned, federally authorized releases of radiation that occur in the normal course of operations. The issue is also of critical importance to the commercial nuclear industry because the decision of the state court, if allowed to stand, could significantly inhibit the development and use of nuclear technology for peaceful purposes in the United States.

As demonstrated below, the Missouri court's decision is inconsistent with the structure and purpose of the Atomic Energy Act and with recent decisions of this Court construing the broad scope of federal preemption of nuclear safety. Although the Missouri court stated that its decision was compelled by this Court's holding in *Silkwood* v. *Kerr-McGee Corp.*, 464 U.S. 238 (1984),[7] neither the facts nor the reasoning of *Silkwood* provide support for the Missouri court's decision.

[7] App. A, *infra*, at 14a.

Accordingly, Mallinckrodt respectfully requests that this Court review the decision both to clarify its prior preemption decisions and to protect the integrity of the federal regulatory scheme governing matters of nuclear safety.

A. State Tort Remedies Against Licensed Nuclear Facilities Are Available Only in the Event of a "Nuclear Incident."

This Court repeatedly has emphasized that the comprehensive federal regulation of radiation hazards established under the Atomic Energy Act has broadly preempted *all* state regulation of nuclear safety.[8] In *Pacific Gas & Electric Co.* v. *State Energy Resources Conservation and Development Commission*, 461 U.S. 190, 212 (1983), the Court characterized the sweeping federal preemption of the field of nuclear safety in the following terms:

> State safety regulation is not preempted only when it conflicts with federal law. Rather, the federal government *has occupied the entire field of nuclear safety concerns*, except the limited powers expressly ceded to the states.

(Emphasis added).

This Court has also held that an award of monetary damages can serve as a potent means of exercising regulatory control. *See San Diego Building Trades Council* v. *Garmon*, 359 U.S. 236, 247 (1959). Accordingly, one of the necessary corollaries of the sweeping federal preemption of nuclear safety is that common-law actions for damages against nuclear facilities are generally prohibited by federal law.

---

[8] *See, e.g.*, Silkwood v. Kerr-McGee Corp., 464 U.S. at 250 (Congress "prohibit[ed] the States from regulating the safety aspects of nuclear development" because the NRC "was more qualified to determine what type of safety standards should be enacted in this complex area"); Train v. Colorado Pub. Interest Research Group, 426 U.S. 1, 17 (1976) (despite congressional amendments establishing limited exceptions to preemption of state regulation by the Atomic Energy Act, "the exclusive regulatory scheme created by the [Act] for source, byproduct, and special nuclear materials was to remain unaltered").

In the Price-Anderson Act,[9] however, Congress recognized a narrow exception to this general principle of broad federal preemption of state regulation of nuclear safety. The Price-Anderson Act established a government indemnification scheme and limited the liability of certain nuclear facilities for damages arising from a "nuclear incident."[10] The overall design of the Act established that private rights of action under state tort law could exist in the event of such an incident.

In light of the Price-Anderson Act, courts have held that compensatory damages can be recovered under state tort law for injuries and property damage caused by a "nuclear incident."[11] However, this exception to the general rule of preemption is a narrow one. Indeed, the recent decision of this Court in *Silkwood* demonstrates that a "nuclear incident" triggering common-law damages liability is synonymous with a nuclear accident.

In *Silkwood*, the decedent's estate sought compensatory and punitive damages for injuries and property damage resulting from the escape of plutonium (a dangerous radioactive substance) from a Kerr-McGee nuclear plant. Silkwood had been contaminated by plutonium on three successive days. 464 U.S. at 241-242. The contamination level in her apartment was sufficiently extensive to require the destruction of many of her personal belongings. *Id.* at 242. Although the precise circumstances surrounding the contamination were never conclusively determined, the jury returned a verdict in favor of Silkwood's estate and awarded the estate both compensatory and punitive damages. *Id.* at 243, 245.

Kerr-McGee appealed the punitive damages award, contending that such awards served to regulate nuclear safety and should be preempted. Although the Tenth Circuit agreed with Kerr-McGee's analysis, this Court ultimately held that the

---

[9] 42 U.S.C. § 2210 *et seq.*

[10] Although the Act applies only to a limited class of nuclear facilities, its legislative history contains a revealing congressional discussion of the relationship between the Atomic Energy Act and state tort remedies.

[11] *See, e.g.*, McKay v. United States, 703 F.2d 464, 468-469 (10th Cir. 1983); Silkwood v. Kerr-McGee Corp., 667 F.2d 908 (10th Cir. 1981), *rev'd on other grounds*, 464 U.S. 238 (1984).

punitive damages award was not preempted. The Court emphasized that despite the broad federal preemption of nuclear safety, Congress never intended to prohibit the states from providing common-law tort remedies "for those injured by illegal conduct" of nuclear licensees. 464 U.S. at 251. After examining the legislative history of the Price-Anderson Act, the Court concluded that Congress intended to preserve some state tort remedies against operators of nuclear facilities, but *only* for injuries caused by a "nuclear incident" — an unplanned or accidental release of radioactive materials. The Court observed:

> [T]he discussion preceding [the] enactment and subsequent amendment [of the Price-Anderson Act] indicates that Congress assumed that *persons injured by nuclear accidents* were free to utilize existing state tort law remedies.

Id. at 251-252 (emphasis added) (footnote omitted). Similarly, when summarizing congressional deliberations concerning the Price-Anderson Act, the Court noted:

> In sum, it is clear that in enacting and amending the Price-Anderson Act, Congress assumed that state-law remedies, in whatever form they might take, were available to *those injured by nuclear incidents.*

Id. at 256 (emphasis added). In short, the Court was careful to distinguish between claims arising from "nuclear incidents," which are not preempted, and all other common-law tort claims, which are subject to the preemptive strictures of the Atomic Energy Act.

The legislative history of the Price-Anderson Act confirms this Court's holding in *Silkwood* that Congress intended to preserve only those tort suits that result from a significant *accidental* release of radiation into the surrounding environment. The Joint Committee Report on the proposed bill states that its purpose was to address the largely hypothetical problem of uninsurable liability "in the remote event of a reactor meltdown with the resulting release of fission products and radioactive materials into the air." S. Rep. No. 296, 85th Cong., 1st Sess. 2, *reprinted in* 1957 U.S. Code Cong. & Ad.

News 1803, 1804. During the legislative hearings and debates, reference was continually made to the need to protect the public from the potentially disastrous consequences of nuclear accidents involving *unplanned releases* of massive amounts of radiation.[12] The principal House sponsor of the bill stated that its primary purpose was "to see that the public is protected in the unlikely event of a runaway reactor." 103 Cong. Rec. 10711 (1957) (remarks of Rep. Price).

When Congress extended the Price-Anderson Act in 1975, the Joint Committee once again confirmed that the term "nuclear incident" is synonymous with accidental releases of large amounts of radiation.[13] In fact, the terms "nuclear incident" and "nuclear accident" are used interchangeably throughout the committee reports.

Thus, contrary to the Missouri court's assumption here, Congress has never intimated that the planned, routine release of low levels of radiation by a nuclear facility in the normal course of operations and in conformity with federal emission and exposure standards could trigger common-law tort liability. Throughout its deliberations on the Price-Anderson Act, Congress consistently assumed that state tort remedies would be available *only* in the unlikely event of a nuclear accident involving a significant unintentional release of radiation into the

---

[12] *See, e.g.*, 103 Cong. Rec. 10712 (1957) (statement of Rep. Cole) (principal focus of Joint Committee was on "this question of protecting the public against any *unforeseen accident*") (emphasis added); *id.* at 10714 (remarks of Rep. Holifield) (discussing "unplanned and unexpected accidents" such as a reactor meltdown "releas[ing] radioactive clouds of gas and contaminated material in solid or liquid form into the countryside"); *id.* at 10715 (remarks of Rep. Holifield) ("they call [a runaway reactor] a nuclear 'incident', I call it an accident"); *id.* at 5046 (remarks of Rep. Vanik) (noting AEC's concern over "possibility of a catastrophic accident in the newly proposed private enterprise atomic energy establishments").

[13] *See, e.g.*, S. Rep. No. 454, 94th Cong., 1st Sess. 2, *reprinted in* 1975 U.S. Code Cong. & Ad. News 2251 (Act designed to afford compensation "in the unlikely event of a catastrophic nuclear accident"); H.R. Rep. No. 1115, 93d Cong., 2d Sess. 7 (1974) (Act intended to protect against "highly improbable severe nuclear incident"); *id.* at 28 (statement of Rep. Roncalio) ("cornerstone" of Act's coverage is to provide prompt compensation to "victims of a nuclear accident").

surrounding environment. Outside of that narrow range of circumstances, all common-law tort actions against licensed nuclear facilities remain barred by the sweeping federal preemption of nuclear safety.

This Court's decision in *Silkwood* is perfectly consistent with these controlling expressions of congressional intent. *See* pp. 8-9 *supra*. Indeed, the Court emphasized in *Silkwood* that its decision upholding a damages award against the operator of a nuclear facility was limited to the unusual facts presented — the unauthorized escape of highly toxic plutonium resulting in the contamination of Karen Silkwood's home and possessions. 464 U.S. at 241-242, 256.

In sharp contrast to the facts underlying *Silkwood*, respondents' petition contains no allegation of any nuclear incident involving a significant accidental release of radiation from Mallinckrodt's plant. Instead, respondents' suit seeks recovery solely on the basis of planned, periodic emissions that are a normal and necessary component of Mallinckrodt's authorized operations. As such, this case falls squarely within the preempted field of exclusive federal authority over matters of nuclear safety.

B. Tort Recovery Would Create An Irreconcilable Conflict Between Federal and State Safety Standards and Would Frustrate the Objectives of the Atomic Energy Act.

This Court also concluded in *Silkwood* that even if a suit results from a nuclear incident, federal law might nonetheless preempt recovery of damages based on state law. 464 U.S. at 256. The Court held that the test for determining whether preemption applies in such cases consists of two factors:

> . . . whether there is an irreconcilable conflict between the federal and state standards or whether the imposition of a state standard in a damages action would frustrate the objectives of the federal law.

Id. These tests compel the conclusion that respondents' suit is preempted.

The Missouri court concluded that respondents' suit did not create an irreconcilable conflict with federal safety stan-

dards on the basis that "payment of damages and compliance with federal safety standards are clearly possible." App. A, *infra*, at 8a.[14] But the theoretical *possibility* of compliance with federal and state regulatory standards has never been viewed as the determinative factor in assessing the applicability of federal preemption. *See, e.g., Fidelity Federal Savings & Loan Association* v. *de la Cuesta*, 458 U.S. 141, 155 (1982). Moreover, the Missouri court's constricted focus on the physical possibility of compliance with dual regulatory standards ultimately proves too much. If the court's approach were correct, state damage awards could never be found to create an irreconcilable conflict with a federal regulatory scheme, because it is at least theoretically possible for any regulated entity to comply with federal safety standards and to pay damages as well. Under the Missouri court's analysis, state damage awards would *never* be subject to federal preemption. The existing law is clearly to the contrary. *See, e.g., Chicago & North Western Transportation Co.* v. *Kalo Brick & Tile Co.*, 450 U.S. 311 (1981); *San Diego Building Trades Council* v. *Garmon*, 359 U.S. at 247.

Because the Missouri court focused solely on the theoretical possibility that Mallinckrodt could comply with both federal and state safety requirements, it failed to recognize the irreconcilable conflict between federal and state safety standards that is presented by respondents' suit. The NRC has established strict (but non-zero) emission and exposure limits for the radionuclides used in Mallinckrodt's operations. *See* pp. 5-6 *supra*. If a radiopharmaceutical facility operating in full compliance with these federal limits could be subjected to billion-dollar damage claims for its routine emissions, the states would effectively establish a zero-release standard for all nuclear licensees. This is so because, if the permissiblity of a release were to be determined after the fact by a jury, a licensee could protect itself from liability only by preventing all emissions. But the imposition of such a zero-release standard would irreconcilably conflict with the NRC's countervailing judgment

[14] The court also noted that "Mallinckrodt can continue to meet federal standards, and, if found wanting by state standards, simply pay the piper." *Id.*

(embodied in 10 C.F.R. Part 20) that a zero-release standard is *not* necessary to protect the public.[15]

Because an accidental release of radiation almost invariably involves a violation of the strict federal emission standards, it was not unreasonable for Congress to conclude that state-law damage actions should be permitted in the event of a nuclear incident. Indeed, as this Court implicitly recognized in *Silkwood*, the recovery of damages under the highly unusual facts presented in that case served to *reinforce* federal emission and exposure standards by penalizing a licensee for

---

[15] The Missouri court may have been led astray by its heavy reliance on the district court decision in Cipollone v. Liggett Group, Inc., 593 F.Supp. 1146 (D.N.J. 1984). It praised the *Cipollone* court's discussion of the preemption doctrine for its "scholarly detail." App. A, *infra*, at 2a n.1. Moreover, it cited *Cipollone* in support of the incredible proposition that "common law liability does not impose requirements on Mallinckrodt" — a proposition that the Missouri court candidly acknowledged "may appear to be disingenuous and smack of sophistry." *Id.* at 8a. The theoretical underpinnings for the Missouri court's decision recently collapsed when the Third Circuit unanimously reversed the district court decision. Cipollone v. Liggett Group, Inc., No. 85-5073 (3d Cir. Apr. 7, 1986).

Cipollone involved state tort claims that were premised on the assertion that certain manufacturers and sellers of cigarettes had failed to provide an adequate warning of the full spectrum of health risks caused by smoking. Although cigarette packages have included a warning label with wording that is required by federal law, the district court struck the defendants' preemption defense on the same theory applied by the Missouri court here, *i.e.*, that there was no irreconcilable conflict between federal and state safety standards because a defendant can comply with federal law and still pay state-authorized damages. 597 F.Supp. at 1167. The Third Circuit reversed, finding that "where the success of a state law damage claim necessarily depends on the assertion that a party bore the duty to provide a warning to consumers in addition to the warning Congress has required on cigarette packages, such claims are preempted as conflicting with the [Federal Cigarette Labeling and Advertising] Act." Slip op. at 13.

Precisely the same reasoning should have been applied here. Respondents' claims are premised on the theory that Mallinckrodt bears a duty to meet state emission requirements in addition to those imposed by federal law. Accordingly, their claims are preempted.

property damage caused by the unauthorized escape of nuclear material.[16] 464 U.S. at 251-258. Here, by contrast, even a licensee that has fully complied with federal safety standards could be subjected to burdensome claims for damages. Allowing respondents' suit to proceed under these circumstances thoroughly undermines the existing federal regulatory scheme and directly conflicts with Congress' express intent to prohibit dual regulation of the field of nuclear safety.[17]

The recovery of damages in this case also would frustrate the developmental objectives of the Atomic Energy Act. In *Pacific Gas & Electric Co.* v. *State Energy Resources Conservation & Development Commission*, this Court stated:

> There is little doubt that a primary purpose of the Atomic Energy Act was, and continues to be, the promotion of nuclear power. The Act itself states that it is a program "to encourage widespread participation in the development and utilization of atomic energy for peaceful purposes to the maximum extent consistent with the common defense and security and with the health and safety of the public" . . . . The House and Senate Reports confirmed that it was "a major policy goal of the United States" that the involvement of private industry would "speed the further development of the peaceful uses of atomic energy" . . . .

---

[16] Although some of the evidence presented at the *Silkwood* trial suggested that Kerr-McGee complied with most federal safety regulations, 464 U.S. at 244, Kerr-McGee stipulated that the plutonium which caused the contamination of Silkwood's residence came from its plant. *Id.* at 243. Moreover, the jury was presented with evidence indicating that plutonium levels found in Silkwood's apartment may have "exceeded that permitted in an unrestricted area such as a residence." *Id.*

[17] *See* Silkwood v. Kerr-McGee Corp., 464 U.S. at 265 (Blackmun, J., dissenting) ("It is incredible to suggest that Congress intended the Federal Government to have the sole authority to set safety regulations, but left intact the authority of States to require adherence to a different state standard through the imposition of jury fines").

461 U.S. at 221. *See also Silkwood* v. *Kerr-McGee Corp.*, 464 U.S. at 281 (Powell, J., dissenting).

This developmental policy will be entirely frustrated if licensees could be subjected to damage claims for alleged injuries arising from emissions in total compliance with applicable federal standards. Indeed, the decision opens the door to a proliferation of common-law damage claims against a wide array of nuclear facilities ranging from commercial reactors to hospitals utilizing x-ray machines.[18] Although the Missouri court assumes that licensees will simply absorb the cost of expanded tort liability (App. A, *infra*, at 7a-8a), a more plausible conclusion is that the unlimited exposure to tort liability foreshadowed by the opinion below will induce many licensees to curtail or abandon their operations, further discourage investment in nuclear technology, and generally inhibit the development and use of nuclear energy on a national scale.

In sum, respondents' suit creates a stark and irreconcilable conflict with an exclusive federal regulatory scheme, and serves impermissibly to frustrate the primary developmental objectives of the Atomic Energy Act. The decision of the Missouri court is based on a misreading of this Court's preemption analysis in *Silkwood* and other cases, and ignores clear expressions of congressional intent to preclude such intrusive state regulation of nuclear safety. As a result, the decision threatens to have a profoundly adverse impact on the integrity of the federal regulatory system and on the viability of the nuclear energy industry.

---

[18] The Missouri court's broad analysis suggests that analogous claims to those raised here could be brought against hospitals, radiologists, specialists in nuclear medicine or the operators of any nuclear facility.

CONCLUSION

The petition for a writ of certiorari should be granted.

Respectfully submitted,

Of Counsel:

WILLIAM A. RICHTER
LEWIS R. MILLS

PEPER, MARTIN, JENSEN,
MAICHEL & HETLAGE
720 Olive Street
St. Louis, Missouri 63101
(314) 421-3850

RAYMOND M. ASHER
ROGER A. KELLER

MALLINCKRODT, INC.
675 McDonnell Boulevard
St. Louis, Missouri 63134
(314) 895-2906

PETER J. NICKLES*
RICHARD A. MESERVE
WILLIAM F. GREANEY

COVINGTON & BURLING
1201 Pennsylvania Avenue, N.W.
P.O. Box 7566
Washington, D.C. 20044
(202) 662-6000

Attorneys for Petitioner
MALLINCKRODT, INC.

**Counsel of Record*

April 1986

APPENDIX

APPENDIX A

IN THE

Missouri Court of Appeals

Eastern District

DIVISION ONE

No. 47771

SAMUEL F. BENNETT, *et al.*,
Plaintiffs-Appellants,

vs.

MALLINCKRODT, INC.,
Defendant-Respondent.

Appeal from the Circuit Court of St. Louis County

Opinion Filed:
July 16, 1985

Plaintiffs appeal from the trial court's dismissal of their petition. We reverse and remand.

In their petition, plaintiffs allege they are representatives of a class who have worked or will work on property adjacent to a radiopharmaceutical processing plant operated by defendant, Mallinckrodt, Inc. (Mallinckrodt). Alleging injuries to their physical and mental health from exposure to radioactive emissions released by the plant, plaintiffs seek damages from Mallinckrodt based on three theories of common law tort: negligence, assault and battery and strict liability for "ultrahazardous activities." In the trial court, Mallinckrodt filed a motion to dismiss, arguing that plaintiffs' action was barred (1) by the federal preemption doctrine, (2) by the political question doctrine and (3) by the action being based upon mere speculative possibilities of future harm. The trial court dis-

missed plaintiffs' petition on two grounds: the court lacked subject matter jurisdiction and the petition failed to state a claim upon which relief could be granted.

We disagree with the trial court. The court does have subject matter jurisdiction, and plaintiffs' petition, although not artfully drawn, does state a claim upon which relief can be granted.

The issues before us are the same three issues which were before the trial court. We address them in order.

FEDERAL PREEMPTION

The doctrine of federal preemption springs from the Supremacy Clause of the United States Constitution, U.S. Const., Art. VI, cl. 2. *E.g., Fidelity Fed. Savings & Loan Ass'n v. de la Cuesta*, 458 U.S. 141, 152, 102 S. Ct. 3014, 3022, 73 L. Ed.2d 664 (1982). The question of whether federal law preempts state action is " 'largely one of statutory construction' " and, therefore, cannot be resolved by general formulas. *Cipollone v. Liggett Group, Inc.*, 593 F. Supp. 1146, 1150 (D.N.J. 1984).[1] Certain principles, however, have been clearly established. First, federal law may expressly preempt state law. *Northern States Power Co. v. Minnesota*, 447 F.2d 1143, 1145-46 (8th Cir. 1971), *aff'd*, 405 U.S. 1035, 92 S. Ct. 1307, 31 L. Ed.2d 576 (1972), or, state law in a given area may be preempted by Congress' implied intent to occupy that area. *E.g., Fidelity Fed.*, 458 U.S. at 153, 102 S. Ct. at 3022; *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230, 67 S. Ct. 1146, 1152, 91 L. Ed. 1447 (1947). Even if Congress has not entirely displaced state regulation in a given area, state law may still be preempted to the "extent it actually conflicts with federal law, that is, when it is impossible to comply with both state and federal law . . ., or where the state law stands as an obstacle to the accomplishment of the full purposes and objectives of Congress . . . ." *Silkwood v. Kerr-McGee Corp.*, 464 U.S. 238, 104 S. Ct. 615, 621, 78 L. Ed.2d 443 (1984).

---

[1] In *Cipollone*, the court describes the development and application of the preemption doctrine in scholarly detail.

Congressional intent pertaining to nuclear energy surfaces in the Atomic Energy Act and its amendments. Until 1954, the development of nuclear energy was a federal monopoly. *See* Atomic Energy Act of 1946, Pub. L. No. 79-585, 60 Stat. 755. With the enactment of the Atomic Energy Act of 1954, ch. 1073, 68 Stat. 919. codified as amended, 42 U.S.C. §§ 2011-2284 (1982), private industry was encouraged to take part in the development and utilization of nuclear energy for peaceful purposes. The federal government, however, retained extensive control over this development by means of a licensing scheme administered by the Atomic Energy Commission, AEC, the predecessor of the present Nuclear Regulatory Commission, NRC.

In 1959, Congress amended the Atomic Energy Act and authorized the NRC to turn over some regulatory authority to those states that adopted a suitable regulatory program, *see* 42 U.S.C. § 2021, but states were still precluded from regulating the safety aspects of nuclear development, *see* 42 U.S.C. § 2021(k). *See also Pacific Gas & Electric Co. v. State Energy Resources Conservation & Development Comm.*, 461 U.S. 190, 205, 103 S. Ct. 1713, 1722, 75 L. Ed.2d 752 (1983); *Northern States Power Co.*, 447 F.2d at 1153-54; *State ex rel. Utility Consumers Council v. Public Service Comm.*, 562 S.W.2d 688, 698 (Mo. App.), *cert. denied*, 439 U.S. 866, 99 S. Ct. 192, 58 L. Ed.2d 177 (1978).

Congress also amended the Atomic Energy Act in 1957 by passing the Price-Anderson Act, Pub. L. No. 85-256, 71 Stat. 576 (1957), to encourage private enterprise to participate in the nuclear industry. Companies contemplating entry into the field had expressed considerable concern over the possibility of a nuclear accident with concomitant bankrupting liability. *See Silkwood v. Kerr-McGee Corp.*, 104 S. Ct. at 623; S. Rep. No. 296, *reprinted in* 1957 U.S. Code Cong. & Ad. News 1803, 1816. Through financial protection and indemnification provisions, the Price-Anderson Act attempted to alleviate this concern by shielding the nuclear industry while safe guarding the public financially. As a result, the Act requires certain licensees to purchase private insurance to cover liability claims, 42 U.S.C. § 2210(a), (b), provides government indemnity for those

licensees, 42 U.S.C. § 2210(c), (d), and establishes maximum limits on liability for nuclear incidents,[2] 42 U.S.C. § 2210(e). *See also Silkwood v. Kerr-McGee Corp.*, 667 F.2d 908, 921 (10th Cir. 1981). Then, in response to a concern that many states would not apply strict liability to radiation injuries, Congress again amended the Act in 1966 and required all indemnified nuclear facilities to waive certain legal defenses such as contributory negligence and governmental immunity in the event of an extraordinary nuclear occurrence.[3] *See* 42 U.S.C. § 2210(n).[4]

The enactment of the Price-Anderson Act and its subsequent amendments triggered an extensive legislative history concerning the relationship between federal statutes pertaining to the nuclear industry and state tort law. No less an authority than the United States Supreme Court has interpreted this history and defined this relationship for us. *See, e.g., Silkwood v. Kerr-McGee Corp.*, 464 U.S. 238, 104 S. Ct. 615, 78 L. Ed.2d 443 (1984); *Pacific Gas & Electric Co. v. State Energy Resources Conservation & Development Comm'n*, 461 U.S. 190, 103 S. Ct. 1713, 75 L. Ed.2d 752 (1983).

The Supreme Court has declared, in essence, that states are precluded from regulating the safety aspects of nuclear development and of hazardous nuclear materials. *Pacific Gas &*

---

[2] The term "nuclear incident" means:

> "any occurrence, including an extraordinary nuclear occurrence . . . causing . . . bodily injury, sickness, disease, or death, or loss of or damage to property, or loss of use of property, arising out of or resulting from the radioactive, toxic, explosive, or other hazardous properties of source, special nuclear, or byproduct material . . . ." 42 U.S.C. § 2014(q).

[3] The term "extraordinary nuclear occurrence" means:

> "any event causing a discharge or dispersal of source, special nuclear, or byproduct material from its intended place of confinement in amounts offsite, or causing radiation levels offsite, which the Commission determines to be substantial, and which the Commission determines has resulted or will probably result in substantial damages to persons offsite or property offsite." 42 U.S.C. 2014(j).

[4] Nothing of record shows Mallinckrodt is licensed by the NRC under the Price-Anderson Act.

Electric Co., 461 U.S. at 205, 103 S. Ct. at 1722; *Silkwood*, 104 S. Ct. at 622. This prohibition is premised on Congress' belief that the NRC is more qualified than the individual states to determine what type of safety standards should be enacted in this complex area. *Silkwood*, 104 S. Ct. at 622. Acknowledging Congress' concern over the state's inability to formulate effective safety standards, the Court in *Silkwood*, nonetheless, found "ample evidence" in the legislative history that Congress had no intention of forbidding states from providing tort remedies for injuries caused by nuclear radiation. *Id.* at 623. For example, the Court quoted from Senate Report No. 296 which explains the Price-Anderson Act does not interfere with state tort law until there is a likelihood that damages would exceed the amount of financial responsibility required together with the amount of federal indemnity. Up to this threshold point, the rights of injured parties are established and defined by state law. *Id.* at 623. *See also* S. Rep. No. 296, 1957 U.S. Code Cong. & Ad. News 1803, 1810.[5]

As a result, "[s]tate law remedies, in whatever form they might take, [are] available to those injured by nuclear incidents." *Silkwood*, 104 S. Ct. at 625. Consequently, the mere fact the federal government has occupied the field of safety

---

[5] The Court also cited Senate Report No. 1605 which reiterates this principle:

> Since its enactment by Congress in 1957 one of the cardinal attributes of the Price-Anderson Act has been its minimal interference with State law. Under the Price-Anderson system, the claimant's right to recover from the fund established by the act is left to the tort law of the various States; the only interference with State law is a potential one, in that the limitation of liability feature of the act would come into play in the exceedingly remote contingency of a nuclear incident giving rise to damages in excess of the amount of financial responsibility required together with the amount of the governmental indemnity. S. Rep. No. 1605, 1966 U.S. Code Cong. & Ad. News 3201, 3206.

does not foreclose state remedies for radiation injuries. Rather, the test for determining preemption in the nuclear energy field is:

> "[1] whether there is an irreconcilable conflict between the federal and state standards or [2] whether the imposition of a state standard in a damages action would frustrate the objectives of the federal law." *Silkwood*, 104 S. Ct. at 626.

THE RECORD

Mallinckrodt contends plaintiffs' action irreconcilably conflicts with federal standards and also frustrates federal objectives. A fact essential to this contention is Mallinckrodt's compliance with federal statutes and regulations. This fact, however, has neither been pleaded nor proved.

Plaintiffs have not alleged Mallinckrodt's compliance with federal statutes or regulations, nor is this fact implicit in any of plaintiffs' claims. Moreover, Mallinckrodt has not filed an answer to plaintiffs' petition, nor has it filed a motion for summary judgment based upon facts established by affidavit or discovery. Mallinckrodt has simply filed a motion to dismiss plaintiffs' petition.

Mallinckrodt, in effect, is seeking an advisory opinion before pleading or proving compliance. Plaintiffs, nevertheless, address Mallinckrodt's arguments as if Mallinckrodt's compliance existed. We address the arguments as presented, rather than avoiding the preemption issues on a procedural defect.[6]

---

[6] Mallinckrodt appears to tacitly admit plaintiffs may state a claim for relief if Mallinckrodt's noncompliance were pleaded. Plaintiffs do allege Mallinckrodt's noncompliance with certain federal regulations but these regulations do not set or affect emission standards.

IRRECONCILABLE CONFLICT

Permitting plaintiffs' petition to state a claim for relief under Missouri law, Mallinckrodt argues, would create an irreconcilable conflict between Missouri and federal standards. Mallinckrodt contends that subjecting it to state tort liability effectively establishes a "zero-release standard." More specifically, Mallinckrodt argues, that if a permissible release is to be determined by a jury "after the fact on an ad hoc basis," a federal licensee, like Mallinckrodt, "could assure avoidance of liability only by a zero release of emissions." This state imposed standard, Mallinckrodt reasons, irreconcilably conflicts with federal standards.

Mallinckrodt's logic is questionable. More important, its conclusion is not persuasive. As other manufacturers, producers and operators functioning in a regulated field, Mallinckrodt is not guaranteed absolute insulation from the consequences of its acts through compliance with federal regulation. *See McKay v. United States*, 703 F.2d 464, 470 (10th Cir. 1983) and *Silkwood v. Kerr-McGee Corp.*, 485 F. Supp. 566, 578-79 (W.D. Okla. 1979) and cases cited therein. Thus, the issue here is not whether Mallinckrodt will be assured of freedom from liability. Rather, the issue is whether there is an irreconcilable conflict between our state standards and federal standards; an issue which, in turn, is answered by whether it is impossible for Mallinckrodt to comply with both federal standards and those standards implicitly reflected in plaintiffs' petition. *Silkwood*, 104 S. Ct. at 626.

As noted, we are at the pleading stage with only plaintiffs' petition before us. Mallinckrodt has not shown our state standards to be more stringent than federal standards, nor has it shown our state standards to be theoretically or practically impossible to meet, if our state standards are in fact more stringent. Moreover, even if Mallinckrodt cannot reduce its radiation emissions below the federal standards, Missouri can decide that, as between Mallinckrodt and plaintiffs, Mallinckrodt ought to bear the costs of compensating those injuries that could have been prevented with a theoretical emission rate lower than the rate approved by the NRC. *See Ferebee v.*

Chevron Chemical Co., 736 F.2d 1529, 1540-41 (D.C. Cir.), cert. denied, ____U.S.____, 105 S. Ct. 545, 83 L. Ed.2d 432 (1984). On the present record, payment of damages and compliance with federal standards are clearly possible. Mallinckrodt can continue to meet federal standards, and, if found wanting by state standards, simply pay the piper.

Arguably, imposing damages for state torts committed by parties operating under federal standards has a possible state regulatory effect on the federal standards. A possible regulatory effect on federal standards by state tort actions, however, has long been accepted. *See, e.g., Cipollone*, 593 F. Supp. at 1155-56. Congress' acceptance of this possibility in the nuclear energy field was specifically noted by the Supreme Court in *Silkwood v. Kerr-McGee*, 104 S. Ct. at 625:

> No doubt there is tension between the conclusion that safety regulation is the exclusive concern of the federal law and the conclusion that a state may nevertheless award damages based on its own law of liability. But as we understand what was done over the years in the legislation concerning nuclear energy, Congress intended to stand by both concepts and to tolerate whatever tension there was between them. We can do no less. It may be that the award of damages based on the state law of negligence or strict liability is regulatory in the sense that a nuclear plant will be threatened with damages liability if it does not conform to state standards, but that regulatory consequence was something that Congress was quite willing to accept.

In short, common law liability does not impose requirements on Mallinckrodt; rather, it allows Mallinckrodt to choose between risking liability by not changing its behavior or attempting to negate the risk by lowering its emission rates. *Cipollone*, 593 F. Supp. at 1167. This reasoning may appear to be disingenuous and smack of sophistry; if so, the charge must be made against the entire judiciary for the reasoning has been continually used to justify the imposition of state tort liability as

a "complement to" federal standards. *See Silkwood*, 104 S. Ct. at 629-30 (Blackmun, J., dissenting); *Ferebee*, 736 F.2d at 1541; *Cipollone*, 593 F. Supp. at 1167, and cases collected therein.

FRUSTRATION OF FEDERAL OBJECTIVES

Mallinckrodt also argues that to permit recovery here would frustrate the objectives of federal law. The purpose of the Atomic Energy Act, Mallinckrodt points out, is to promote private nuclear development. If federal licensees like Mallinckrodt are subjected to claims even if in compliance with federal standards, then, Mallinckrodt reasons, the purpose of the Act would be frustrated by permitting state law to regulate federal licensees and discourage private industry.

As just noted, the Supreme Court addressed this specific issue in *Silkwood v. Keer-McGee*. Tort recovery to injured plaintiffs may create a tension between state law and federal law, but Congress was willing to accept this consequence. *Silkwood*, 104 S. Ct. at 625. The fact that some plaintiffs may be successful in recovering compensation from Mallinckrodt for injuries suffered does not mean that the state is setting its own emission levels. *Silkwood*, 104 S. Ct. at 626.

Moreover, if plaintiffs' recovery in tort merely inconveniences Mallinckrodt or makes its operation more costly, there is no frustration of federal policy or purpose. *See, e.g., Marshall v. Consumers Power Co.*, 65 Mich. App. 237, 237 N.W.2d 266, 281-82 (1975). State tort actions may frustrate federal objectives if the federal regulatory statutes have as an objective the affirmative subsidization of the regulated industry and if the statutes, explicitly or implicitly, command states to accept the use of the regulated product. *Ferebee*, 736 F.2d at 1542-43. The Atomic Energy Act, however, does not subsidize the nuclear industry. One of the purposes of the Atomic Energy Act may be to promote the peaceful development of nuclear energy, but the Act does not subsidize the nuclear industry to such an extent that states are commanded to use or accept the

use of nuclear energy. *See, e.g., Pacific Gas*, 461 U.S. at 205, 103 S. Ct. at 1722. States do have some control over the extent of use of nuclear materials within their boundaries as well as determining where and whether such use will occur. *See, e.g., State ex rel. Utility Consumers Council*, 562 S.W.2d at 698. They are not always required to tolerate actions permissible under federal law, *see, e.g., Pacific Gas*, 461 U.S. at 216, 222-23, 103 S. Ct. at 1728, 1731-32; *Ferebee*, 736 F.2d at 1543, and this is one such area.

Furthermore, radiation emission standards lower than federal emission standards are consistent with the federal aim of achieving radiation emissions as low as reasonably possible. *See* 10 C.F.R. § 20.1(c). The NRC has established emission standards designed to protect the public and, at the same time, allow for further development of nuclear energy using current technology. 10 C.F.R. § 20.1(c), 10 C.F.R. § 20.105-.106; 42 U.S.C. § 2201(b). These standards reflect an administrative decision—an administrative balancing of overall societal risks against societal benefits. *Silkwood*, 485 F. Supp. at 581-82; *Crowther v. Seaborg*, 312 F. Supp. 1205, 1231 (D. Colo. 1970); Keyes & Howarth, *Approaches to Liability for Remote Causes: The Low-Level Radiation Example*, 56 Iowa L. Rev. 531, 541, 568 (1971). Emission standards adequate for administrative purposes in meeting governmental goals, however, are not necessarily adequate for purposes of state tort law encompassing broader compensatory goals. These administrative emission standards are not absolute safety levels below which no injury can occur. *Silkwood*, 485 F. Supp. at 579-81; Keyes & Howarth, *supra*, at 545. As a result, insofar as state law is concerned, they are merely guidelines.

This conclusion is reflected in the prefatory language of 10 C.F.R. § 20. In various subsections, § 20 sets out the emission standards for NRC licensees. Preceding these subsections, the Purpose Clause of § 20 states:

> "In accordance with recommendations of the Federal Radiation Council, . . . [licensees] should, in addition to complying with the requirements set forth in this part, make every reasonable effort to maintain

> radiation exposures, . . . as low as is reasonably achievable." 10 C.F.R § 20.1(c).

This language clearly implies the federal standards are, at best, guidelines to state tort law. "In addition to complying with" the federal standards, licensees are requested to make every reasonable effort to achieve emissions as low as is reasonably achievable. Compliance with federal standards is mandatory; the request to achieve emission rates lower than these standards, however, implicitly acknowledges these lower rates may, in fact, be achieved. Moreover, the determination of the reasonableness of the effort to achieve these lower rates is not exclusively arrogated by the NRC. Sensibly, this implies state tort law can determine whether reasonable efforts have been made, and, thus, complement the NRC standards. This implication is reinforced by the industrial and commercial use of nuclear energy still being at the cutting edge of science. Scientific data affecting reasonable emission standards change often and rapidly. *See Silkwood*, 485 F. Supp. at 581; Keyes & Howarth, *supra*, at 540. Thus, even though NRC emission standards may be based upon the best scientific data available at the time they are promulgated, these standards necessarily lag behind the change in scientific data. Keyes & Howarth, *supra*, at 540. To accept Mallinckrodt's reasoning would leave parties injured by radioactive emissions without recourse when science or technology has improved to permit levels of emissions lower than those currently established by the NRC.

This was not Congress' intent. States may be preempted from setting their own emission standards, but they are not preempted from compensating injured citizens. *See Silkwood*, 104 S. Ct. at 625-26. "Congress . . . disclaimed any interest in promoting the development and utilization of atomic energy by means that fail to provide adequate remedies for those who are injured by exposure to hazardous nuclear materials." *Silkwood*, 104 S. Ct. at 626.

INCIDENT/ACCIDENT

Mallinckrodt also argues that if any state tort claims survive preemption, the only permissible ones are those arising out of a "nuclear incident." Relying on the facts of *Silkwood* selected language from that case as well as selected passages from the legislative history of the Price-Anderson Act Mallinckrodt defines "nuclear incident" as "an accidental release of radiation in excess of federal limits." Mallinckrodt then argues releases in compliance with federal regulations cannot constitute accidents or "nuclear incidents" and, therefore, claims, like plaintiffs, seeking recovery for alleged injuries resulting from "planned, federally permissible releases" must be preempted. We read *Silkwood* as well as the legislative history differently.

Mallinckrodt views *Silkwood* as dealing with three separate incidents of contamination of Karen Silkwood away from Kerr-McGee's plant. These three events are in turn viewed as constituting something out of the ordinary—a "nuclear incident." Mallinckrodt also seizes on "nuclear incident" being used interchangeably with "nuclear accident" by various courts, including the Supreme Court in *Silkwood*, to show the latter term necessarily defines the former. *See, e.g., Silkwood*, 104 S. Ct. at 623, 625.

Mallinckrodt's logic is flawed. If "nuclear incident" is a term of art, its definition is found in 42 U.S.C. § 2014(q), which, as noted, defines "nuclear incident" to mean "any occurrence . . . causing . . . bodily injury, sickness, disease, or death. . . ." The courts' use of "incident" interchangeably with "accident" to describe or refer to the particular facts before them does not circumscribe the broad generic definition. Courts also use the term "hazard" and "occurrence" interchangeably with the term "incident." *See, e.g., Silkwood*, 104 S. Ct. at 624, 626. Obviously, the generic term "occurrence" includes the more limited defined term "accident." Applying Mallinckrodt's reasoning to these interchanged references means the term "incident" could also be equated with "hazard" or "occurrence." No sensible argument can be made that any emission or exposure is not an occurrence or does not entail some hazard.

This same argument was summarily dealt with in *Van Dissel v. Jersey Central Power & Light Co.*, 194 N.J. Super. 108, 476 A.2d 310, *cert. denied*, 99 N.J. 186, 491 A.2d 690 (1984). Upon remand by the United States Supreme Court for further consideration in light of *Silkwood v. Kerr-McGee Corp.*, 464 U.S. 238, 104 S. Ct. 615, 78 L. Ed.2d 443 (1984), the New Jersey Superior Court found no preemption of claims for property damage resulting from the normal operation of a nearby nuclear power reactor plant. In reaching its decision, the New Jersey Court concluded, as we conclude here, that compensable injuries do not have to be caused by "nuclear accidents." 476 A.2d at 316. *See also McKay v. United States*, 703 F.2d at 465.

We have also carefully read the selections of congressional debates and reports cited by Mallinckrodt in support of its position. We remain unpersuaded. The examples of "typical" nuclear incidents Mallinckrodt selects from the legislative history are examples of incidents but are not necessarily typical. One of Congress' concerns in enacting the Price-Anderson Act and its subsequent amendments was to protect the public by assuring the availability of funds for claims arising out of major nuclear incidents. *See, e.g.*, S. Rep. 454, 94th Cong., 1st Sess. (1975), U.S. Code Cong. & Admin. News 1975, p. 2251; H.R. Rep. No. 2043, 89th Cong., 2d Sess. (1966). Most, if not all, of Mallinckrodt's cited examples address this concern and, thus, are examples of major or catastrophic incidents.[7] This does not mean that emissions or exposures less than federal limits are preempted or are not included under the Price-Anderson indemnification system. Standard insurance was assumed to cover minor incidents, and, for these, the nuclear industry would not need federal assistance. *See, e.g.*, H.R. Rep. No. 2043, 89th Cong., 2d Sess. 11 (1966). Consequently, in the hearings, reports and debates cited by Mallinckrodt, the precise

---

[7] *See, e.g., Proposed Amendments to Price-Anderson Act Relating to Waiver of Defenses: Hearings before the Joint Committee on Atomic Energy*, 89th Cong., 2d Sess. 47 (1966) (statement of Joseph Hennessey, AEC General Counsel); S. Rep. No. 454, *reprinted in* 1975 U.S. Code Cong. & Ad. News 2251; H.R. Rep. No. 1115, 93d Cong., 2d Sess. 7 (1974). *See also* H.R. Rep. No. 2043, 89th Cong., 2d Sess. 9-11 (1966).

definition of a nuclear incident, especially in relation to minor incidents, was not a concern.

If plaintiffs' claims must be confined to "nuclear incidents" as defined in federal statutes, plaintiffs' claims are properly pleaded. The term nuclear incident means:

> "any occurrence, . . . causing, . . . bodily injury, sickness, disease, or death, or loss of or damage to property, or loss of use of property, arising out of or resulting from the radioactive, . . . properties of source, special nuclear, or byproduct material . . . ." 42 U.S.C. § 2014(q).

This definition is "designed to protect the public against any form of damage arising from the special dangerous properties of the materials used in the atomic energy program." S. Rep. No. 296, 1957 U.S. Code Cong. & Ad. News 1817. Moreover, an incident does not necessarily have to occur within a short period of time, and steady exposure to radiation, perhaps, from an undetected leak of radioactive materials, can constitute an incident. *Id.* We also note 42 U.S.C. § 2014(q) itself does not require an accidental or unplanned release. *See also McKay v. United States*, 703 F.2d 464 (10th Cir. 1983).

In summary, the legislative history of the Price-Anderson Act and its amendments, as well as case law, consistently reflect the underlying principle of interfering with state law to the minimum extent necessary. *E.g.*, S. Rep. No. 1605, 1966 U.S. Code Cong. & Ad. News 3206. Consequently, the rights of a party injured by radiation are for the most part left to state law. S. Rep. No. 296, 1957 U.S. Code Cong. & Ad. News 1810. While we may be attracted by the logic of some of Mallinckrodt's arguments supporting preemption, our understanding of *Silkwood* is that its reach is greater and much more inclusive than the limits Mallinckrodt would place on it. We are constrained to follow not only the holding of *Silkwood* but also to follow our understanding of its teaching.

POLITICAL QUESTION DOCTRINE

The political question doctrine establishes a limitation on the authority of the judiciary to resolve issues, decidedly political in nature, that are properly left to the legislature. If a case actually involves the resolution of a political question, the matter is immune from judicial review. There should, however, be no dismissal for nonjusticability on the basis of a political question's presence unless

> "[p]rominent on the surface of any case held to involve a political question [there] is found a textually demonstrable constitutional commitment of the issue to a coordinate political department; or a lack of judicially discoverable and manageable standards for resolving it; or the impossibility of deciding without an initial policy determination of a kind clearly for nonjudicial discretion; or the impossibility of a court's undertaking independent resolution without expressing lack of the respect due coordinate branches of government; or an unusual need for unquestioning adherence to a political decision already made; or the potentiality of embarrassment from multifarious pronouncements by various departments on one question." *Baker v. Carr*, 369 U.S. 186, 217, 82 S. Ct. 691, 710, 7 L.Ed.2d 663 (1962).

The propriety of nuclear related activities is a political question properly committed to the legislative and executive branches of our government. Nonetheless, individual tort recoveries stemming from those activities normally are not precluded by the political question doctrine. *McKay*, 703 F.2d at 470. "If Congress had intended that some department or departments should have full and complete and exclusive authority in the area of obtaining redress for injuries, it certainly would have said so either in the legislative history or in the Act itself." *Id.* at 472.

Defendant relies on *Crowther* v. *Seaborg*, 312 F. Supp. 1205 (D. Colo. 1970) to assert plaintiffs' claim was barred by the political question doctrine. *Crowther* is distinguishable, however. The plaintiffs in *Crowther* were seeking an injunction

to stop testing involving nuclear detonations and a determination that the applicable radiation safety standards were inadequate. The court in *Crowther* rightly held that the extent and nature of government participation in the development of energy sources was a political question as was the establishment of radiation protection standards. 312 F. Supp. at 1231-32. Plaintiffs in this case, however, are not trying to establish standards that conflict with legislative determinations; they are seeking compensation for injuries. Nor does the allowing of recovery for those injuries which do occur mean the state is creating new standards; rather, the state is protecting its citizens by making defendant responsible for injuries arising from its activities as a cost of doing business.

FAILURE TO STATE A CLAIM

Plaintiffs plead their three theories of liability in three separate Counts: Count I—negligence, Count II—assault and battery, Count III—strict liability. Although stated somewhat differently in two of the three Counts, plaintiffs allege their injuries result from Mallinckrodt's radioactive emissions which have or will cause (1) "various health and physical illnesses" and "injury, damages to health, property and safety of plaintiffs," (2) "a drastic increase in the class of many physical illnesses," such as "leukemia, cancer and nervous disorders," and (3) "apprehension ... [because of] severe psychotic trauma" from the exposure and increased risk of illness.[8]

Focusing on these allegations of damages, Mallinckrodt argues that plaintiffs have failed to state a claim because they do not "specifically allege any particular individual has sustained an identifiable and detectable physical injury." We disagree.

---

[8] These injuries are alleged by plaintiffs in Count I. In Count II, plaintiffs allege the "radiation striking" them has caused and will cause (1) "various health problems ... as well as apprehension and fear" and (2) "permanent and irreparable physical and mental injuries as well as mental anguish and damages." In Count III, they allege their damages are the same "as hereinabove stated."

Injury is an essential element of a tort based on negligence. *E.g., Chubb Group of Ins. Cos. v. C.F. Murphy & Assocs., Inc.*, 656 S.W.2d 766, 774 (Mo. App. 1983); *See also* W. Prosser, *Law of Torts* § 30, at 143 (4th ed. 1971). It also is an essential element of a tort based on strict liability. *E.g.*, Restatement (Second) of Torts § 519 (1977). Thus, unless plaintiffs properly plead their injuries in their negligence and strict liability claims, they have failed to state a claim upon which relief can be granted.[9] *See, e.g., Dix v. Motor Market, Inc.*, 540 S.W.2d 927, 932 (Mo. App. 1976).

PLAINTIFFS' PLEADED INJURIES

(1) "Various health and physical illness" and "Injury, damages to health, property and safety to plaintiffs"

Technical forms of pleading are no longer required. Rule 55.04. To plead a claim for relief, the pleader must simply allege a "plain statement of the facts showing [he] is entitled to relief . . . ." Rule 55.05. Although the pleader need not allege evidentiary or operative facts, *e.g., Scheibel v. Hillis*, 531 S.W.2d 285, 290 (Mo. banc 1976), he must allege ultimate facts, *id.* at 290, and cannot rely on mere conclusions, *e.g., Commercial Bank of St. Louis County v. James*, 658 S.W.2d 17, 22 (Mo. banc 1983). These rules and their interpretations are much easier stated than applied. Many allegations simply do not fall within a precise definition of a fact. They are mixed statements of fact and conclusions. In Missouri, however, we still remain stuck in a semantic morass, attempting to differentiate fine and evanescent distinctions between evidentiary facts, ultimate facts and conclusions. *See, e.g., Einhaus v. Ames Co.*, 547 S.W.2d 821, 825 (Mo. App. 1976). To us, the distinction is really one between generality and particularity.

Admittedly, forceful argument can be made that plaintiffs' allegations of injury are vague and ambiguous. Mere vagueness, however, is not grounds for a motion to dismiss, *e.g.*,

---

[9] For an assault and battery, plaintiffs' Count II, "[t]he establishment of the technical cause of action, even without proof of any harm, entitles the plaintiff to vindication of his legal right by an award of nominal damages." W. Prosser, *Torts* § 10, at 38 (4th ed. 1971).

Pillow v. Gen. American Life Ins. Co., 564 S.W.2d 276, 279 (Mo. App. 1978), and we prefer to dispose of a case on its merits instead of on the pleadings, *see, e.g., Laclede Gas Co. v. Hampton Speedway Co.*, 520 S.W.2d 625, 631 (Mo. App. 1975). More important, a petition should be dismissed only if it appears the pleader can prove no set of facts in support of his claim for relief. *E.g., Gaines v. Monsanto Co.*, 655 S.W.2d 568, 570 (Mo. App. 1983); *Pillow*, 564 S.W.2d at 279-80.

The narrow issue here is whether plaintiffs' allegations of "various health and physical" illnesses or "injury" generally are ultimate facts or conclusions. Rational application of our basic pleading principles can be used to classify plaintiffs' allegation of injuries either as ultimate facts or conclusions. Rather than torture logic to reach a preconceived result, we focus on whether Mallinckrodt knows what this action involves. We think it does. If plaintiffs were pleading in the federal courts, their allegations of injuries would withstand a motion to dismiss. *Pearl v. Allied Corp.*, 566 F. Supp. 400, 403-04 (E.D. Penn. 1983). Mallinckrodt is no less informed simply by being sued in our state courts. Admittedly, there are differences between the so-called "notice pleading" in the federal court and our code pleading. The only relevant difference here, however, would be that plaintiffs' allegations of injuries in the federal courts not only would withstand a motion to dismiss but also would withstand a motion to make more definite and certain, *see, e.g.*, 2A *Moore's Fed. Practice*, §§ 12.08, 12.18 (2d ed. 1985), but, in our courts, these allegations would be and are subject to a motion to make more definite and certain.

Plaintiffs' pleadings are subject to a motion to make more definite and certain because they lack sufficient detail for Mallinckrodt to prepare a responsive pleading. Rule 55.27(d). Arguably, Mallinckrodt could answer by filing a general denial and use discovery to gain information for trial. But an important element of plaintiffs' claims is a medically diagnosable injury or illness. A clear diagnosis is essential for identifying the precise cause of the injury and identifying Mallinckrodt as the culprit. Thus, although the injuries as pled withstand the motion to dismiss, they are subject to make more definite and certain. Rule 55.27(d).

(2) "A drastic increase in the class of many physical illnesses" such as "leukemia, cancer and nervous disorders."

In the pleaded injuries just discussed, plaintiffs' claim present physical injuries. The question there was whether the language used was precise enough to state a claim. In this claim of injury, plaintiffs allege future injuries. Sensibly read, plaintiffs allege the exposure to radiation has increased their risk as candidates for cancer. The question here is whether plaintiffs may recover on the theory that their increased risk of contracting cancer is a present injury.

In Missouri, no different than most other jurisdictions, future damages in a personal injury action are not compensable unless reasonably certain to occur. *See, e.g., Hahn v. McDowell*, 349 S.W.2d 479, 482 (Mo. App. 1961). No Missouri Court, however, has been confronted with the precise issue here. Courts in other jurisdictions have. In resolving the issue, they quite logically determine whether the enhanced risk from exposure to a toxic substance, as pleaded or proved, is a reasonable certainty or can be considered a reasonable certainty. They find it is not. *See, e.g., Morrissy v. Eli Lilly & Co.*, 76 Ill. App.3d 753, 32 Ill. Dec. 30, 37, 394 N.E.2d 1369, 1376 (1979); *Ayers v. Township of Jackson*, 189 N.J. Super. 561, 461 A.2d 184, 187 (Law Div. 1983); *Askey v. Occidental Chemical Corp.*, 102 A.D.2d 130, 477 N.Y.S.2d 242, 247 (1984). *See also Laswell v. Brown*, 683 F.2d 261, 269 (8th Cir. 1982), *cert. denied*, 459 U.S. 1210, 103 S. Ct. 1205, 75 L.Ed.2d 446 (1983); *Mink v. University of Chicago*, 460 F. Supp. 713, 719 (N.D. Ill. 1978).

This resolution makes sense. Plaintiffs here, like the plaintiffs in the cited cases, base their claim on mathematical probabilities. Damages based on mere mathematical probabilities significantly undercompensate those who actually develop cancer and are a windfall to those who do not. No acceptable definition of justice would contemplate such a result. Consequently, this claim of injury is fatally defective.

(3) "Apprehension . . . [because of] severe psychic trauma from the exposure and increased risk of illness."

We have paraphrased this pleading of injury.[10] As we understand it, plaintiffs seek to recover for emotional distress allegedly suffered by them as a result of being exposed to radiation, and plaintiffs seek compensation for this emotional distress without a showing of physical injury. In short, plaintiffs seek compensation for fear of cancer—cancerphobia.

Plaintiffs allege their emotional distress is a direct result of Mallinckrodt's tortious conduct. Plaintiffs no longer need to allege a contemporaneous physical injury to plead a tort action for emotional distress. *See Bass v. Nooney Co.*, 646 S.W.2d 765, 772 (Mo. banc 1983); *Young v. Stensrude*, 664 S.W.2d 263, 265 (Mo. App. 1984). Plaintiffs need only to plead Mallinckrodt should have realized its conduct involved an unreasonable risk of causing plaintiffs' emotional distress and the distress is medically diagnosable and medically significant. *Bass v. Nooney*, 646 S.W.2d at 772-73.

We have read plaintiffs' petition carefully, giving it the most liberal interpretation. Our pleading principles may abolish the technicalities of pleading. They do not abolish the need for clear thinking and clarity. Plaintiffs do plead a "psychic

---

[10] More specifically, plaintiffs plead:

> "[they] have suffered apprehension and will continue in the future under severe psychic trauma as a result of their exposure to and the increased risk to the [noted] illnesses."

Obviously, plaintiffs have failed to include several grammatical articles necessary to give this pleading a precise meaning. No useful purpose is served, however, in making these additions a prerequisite to our consideration. We have paraphrased the pleading to reach the issue that would be raised by an appropriate amendment.

trauma," which is medically diagnosable and can be medically significant.[11] Plaintiffs, however, do not plead Mallinckrodt should have realized its alleged conduct involved an unreasonable risk of causing this psychic trauma. Thus, plaintiffs have not met the minimal requirements of *Bass v. Nooney, supra,* and, as now pleaded, this claim is fatally defective.

We do not address nor intend to comment on the extent of plaintiffs' possible problems in properly pleading forseeability here, to say nothing of the complex and formidable problems of proof this pleading entails. *See generally* G. Nothstein, *Toxic Torts* § 16.05-.11 (1984).

STRICT LIABILITY

Plaintiffs last Count sounds in strict liability for "ultrahazardous" activities. Restatement of Torts § 519 (1938) creates a claim in strict liability for damages caused by an "ultrahazardous activity." Restatement (Second) of Torts § 519 (1977), however, replaces the term "ultrahazardous" with the term "abnormally dangerous." Our research has not uncovered any Missouri case which expressly accepts or adopts either version of § 519. Nonetheless, we believe strict liability, as defined by the Restatement (Second) of Torts, should be adopted and applied to claims based on radiation damage, and, under this definition, we find plaintiffs have pleaded a claim for relief in strict liability.[12]

---

[11] Psychic trauma is defined as:

> "an upsetting experience precipitating or aggravating an emotional or mental disorder." *Stedman's Medical Dictionary* 1476 (24th ed. 1982); or "An emotional injury or shock that leaves a lasting impression on the conscious or subconscious mind. It may cause a permanent change in the personality of the patient." 3 *Schmidt's Attorneys' Dictionary of Medicine* P-302 (1984).

[12] As used in the Restatement, the terms "ultrahazardous" and "abnormally dangerous" are terms of art. Each has a separate and distinct definition, but these definitions overlap and are not mutually exclusive. Compare Restatement of Torts § 520 (1938) with Restatement (Second) of Torts § 520 (1977).

No useful purpose is served in affirming the dismissal because plaintiffs used "ultrahazardous" rather than "abnormally dangerous," simply to have plaintiffs replead this claim using the latter and proper term.

The doctrine of strict liability stems from the English case, *Rylands v. Fletcher*, 1 L.R.-Ex. 265 (1866), *aff'd*, 3 L.R.-E. & I. App. 330 (1868). The lower court, the Exchequer Chamber, stated the "true rule" of law to be: "the person who for his own purposes brings on his land and collects and keeps there anything likely to do mischief if it escapes, must keep it at his peril, and if he does not do so is prima facie answereable for all the damage which is the natural consequence of its escape." *Fletcher v. Rylands*, 1 L.R.-Ex. 265, 279-80 (1866). The House of Lords limited the "rule" by making it applicable only to non-natural uses of land. *Rylands v. Fletcher*, 3 L.R.-E. & I App. 330, 338 (1868). See also Prosser, *Law of Torts* § 78, at 505-06 (4th ed. 1971).

As Prosser explains, the "true rule" of *Rylands v. Fletcher* is the limited rule. It makes the defendant liable "when he damages another by a thing or activity unduly dangerous and inappropriate to the place where it is maintained, in the light of the character of that place and its surroundings." *Id.* at 508. Sections 519 and 520, Restatement (Second) of Torts (1977), reflect this principle, with § 520 listing six factors pertinent in determining whether an activity is abnormally dangerous.[13]

In Missouri, we have expressly rejected the rule of the Exchequer Chamber, i.e., a defendant is strictly liable when anything under his control escapes and does damage. *See, e.g., Kelley v. National Lead Co.*, 240 Mo. App. 47, 210 S.W.2d 728, 733 (1948); *Greene v. Spinning*, 48 S.W.2d 51, 61 (Mo. App. 1931). Thus, in Missouri, as in many other jurisdictions, the

---

[13] These six factors are:

(a) existence of a high degree of risk of some harm to the person, land or chattels of others;

(b) likelihood that the harm that results from it will be great;

(c) inability to eliminate the risk by the exercise of reasonable care;

(d) extent to which the activity is not a matter of common usage;

(e) inappropriateness of the activity to the place where it is carried on; and

(f) extent to which its value to the community is outweighed by its dangerous attributes.

"true rule" of *Rylands v. Fletcher* has been misstated and, as misstated, has been almost totally rejected, "most often on facts which had no proper application in the first place." Prosser, *supra*, at 508-09.

Be that as it may, the "rule of *Rylands v. Fletcher*" is very narrowly applied in Missouri. In blasting cases, for example, a claim for strict liability is as valid a claim as a claim based upon nuisance or trespass. *Summers v. Tavern Rock Sand Co.*, 315 S.W.2d 201 (Mo. 1958); *Carson v. Blodgett Const. Co.*, 189 Mo. App. 120, 174 S.W. 447 (1915) (strict liability); *Blackford v. Heman Const. Co.*, 132 Mo. App. 157, 112 S.W. 287 (1908) (nuisance); *Johnson v. Kansas City Terminal Ry. Co.*, 182 Mo. App. 349, 170 S.W. 456 (1914); *Faust v. Pope*, 132 Mo. App. 287, 111 S.W. 878 (1908) (trespass). But our courts go no further. In other cases, in which plaintiff alleged his damage was caused by an "ultrahazardous" or "abnormally dangerous" thing or activity, our courts have rejected claims based upon strict liability and required the claim to be brought in negligence, nuisance or trespass. *See generally* II Mo. Tort Law, Chap. 32, *Strict Tort Liability* (Mo. Bar CLE 1980); Comment, *The Rylands v. Fletcher Doctrine and Its Standing In Missouri*, 18 Mo. L. Rev. 53 (1953).

Arguably, this history demonstrates a refusal to extend the use of strict liability as a legal tool to hold liable for damages those engaged in abnormally dangerous activities. If this is true, the question here is not would, but rather should, a nuclear plant operator be held strictly liable for his actions? This question is not answered by the usually salutary aphorism—if it ain't broke, don't fix it. Theories of liability other than strict liability may serve society better in resolving issues between parties when normal danger is involved. These theories are not equally effective in the nuclear industry.

Understandably, a record was not made for the purpose of determining whether, strict liability, as defined by the Restatement, should be applied here. Certain facts, however, are common knowledge or part of the present record.

The nuclear industry is unique in its inherent and, at present, unrectifiable danger. It is regulated by the federal

government. Numerous safety standards have been set to ensure the public welfare, but even with these precautions taken, the potential danger is still enormous. Moreover, as previously noted, the safety standards are not guarantees of absolute safety. Federal emission standards are only guidelines which are based upon an inherently inexact balancing of human and environmental risks against social benefits. *See Silkwood*, 485 F. Supp. at 581-82; Keyes & Howarth, *supra*, at 541, 568. *See also* 10 C.F.R. § 20.1(c). Each licensee is therefore requested to make every reasonable effort to maintain radiation exposures and releases as low as reasonably achievable. 10 C.F.R. § 20.1(c). The value of the nuclear industry to society may be great, but the use of nuclear material is not yet so common that strict liability should not be applied at this time.[14] This is the basis for the Restatement and Prosser recognizing the nuclear industry is particularly suited for the application of strict liability. *See* Restatement (Second) of Torts § 520, comments g, h (1977); Prosser, *supra*, § 78, at 516. In short, the nuclear industry creates dangers as great as blasting operations, if not more so, and, thus, if it fits the criteria established for strict liability, it should be governed by those legal liabilities imposed upon blasting operations because of its danger.

Our Courts have not been deterred in the past from adopting Restatement principles of tort deemed sensible and necessary.[15] We should not be deterred here. Plaintiffs have alleged that Mallinckrodt's activities have created a high degree

---

[14] Nuclear reactors may never be considered a natural use of the land. On the other hand, nuclear reactors may follow the same path as the "aeroplane," and technological advances and widespread use may make strict liability inapplicable to the nuclear industry as it now is to the use of aeroplanes. *See* Prosser, *supra*, § 78, at 514-15.

[15] *See Blevins v. Cushman Motors*, 551 S.W.2d 602 (Mo. banc 1977) (products liability—Restatement (Second) of Torts § 402A); *Pretsky v. Southwestern Bell Telephone Co.*, 396 S.W.2d 566, 568-69 (Mo. 1965) (intentional infliction of emotional harm—Restatement (Second) of Torts § 48); *Porter v. Crawford & Co.*, 611 S.W.2d 265 (Mo. App. 1980) (prima facie tort—Restatement (Second) of Torts § 870); *Annbar Associates v. American Express Co.*, 565 S.W.2d 701 (Mo. App. 1978) (injurious falsehood—Restatement (Second) of Torts § 623A *et seq.*).

of risk of harm, the harm has been and will be significant, the risk cannot be eliminated, the harm outweighs the value of the operation of the plant and they have suffered injuries. These are the factors to be considered in a claim for strict liability. Restatment (Second) of Torts §§ 519 and 520 (1977).

The Restatement (Second) of Torts § 519 (1977) speaks of "abnormally dangerous activities," and § 520 lists pertinent factors to determine the appropriateness of the activity in question. The Restatement suggests the court should balance the risks against the benefits and determine, as a matter of law, whether the benefits outweigh the risks. This determination is no different than the determination made by the court when it determines the reasonableness of the use of the land in nuisance cases. *See, e.g., Clinic & Hospital, Inc. v. McConnell*, 236 S.W.2d 384, 391 (Mo. App. 1951).[16] On remand, the trial court should develop the appropriate record for its determination whether strict liability, as defined by Restatement (Second) of Torts § 520 (1977), should be applied here.[17]

---

[16] "What is a reasonable use of one's property and whether a particular use is an unreasonable invasion of another's use and enjoyment of his property cannot be determined by exact rules, but must necessarily depend upon the circumstances of each case, such as locality and the character of the surroundings, the nature, utility and social value of the use, the extent and nature of the harm involved, the nature, utility and social value of the use or enjoyment invaded, and the like." 236 S.W.2d at 391.

[17] The factors listed by the Restatement are, as their designation implies, simply factors to be considered by the court. They are not elements of a claim for relief. Restatement, *supra*, § 520. Forceful argument can be made that factor (f) of § 520—social risk weighed against social benefit—has been predetermined by the federal government licensing Mallinckrodt's operations, if the operations are in fact licensed.

INJUNCTIVE RELIEF

In addition to monetary damages, plaintiffs also seek to enjoin Mallinckrodt's operations. The propriety of this request was not raised as an issue before us. It is clear, however, plaintiffs are not entitled to this injunctive relief. Enjoining Mallinckrodt's operations would effectively establish a state standard, and, as a result, would frustrate federal law. *See, e.g., Pennsylvania v. General Public Utilities Corp.*, 710 F.2d 117, 120 (3d Cir. 1983); *Crowther v. Seaborg*, 312 F. Supp. at 1235.

Judgment reversed. Cause remanded.

HAROLD L. SATZ

Harold L. Satz, Judge

ROBERT O. SNYDER — *Concurs*

Robert O. Snyder, Presiding Judge

JAMES A. PUDLOWSKI — *Concurs*

James A. Pudlowski, Judge

IN THE

Missouri Court of Appeals

Eastern District

DIVISION ONE

SAMUEL F. BENNETT, *et al.*
Plaintiffs-Appellants,

vs.

MALLINCKRODT, INC.
Defendant-Respondent.

No. 47771

Appeal from the Circuit Court of St. Louis County

Opinion Filed:
September 26, 1985

ON MOTIONS FOR REHEARING OR, IN THE ALTERNATIVE, FOR TRANSFER TO THE SUPREME COURT

PER CURIAM

In its motion for rehearing, Mallinckrodt points out that we did not address one of its contentions raised on appeal. This contention centers on statements made by plaintiffs' counsel during oral argument on Mallinckrodt's motion to dismiss. Mallinckrodt asserts these statements clarify and control the meaning of plaintiffs' petition. We were aware of this contention. We read those cases cited by Mallinckrodt in support of its contention and found them to be inapposite. In addition, we note counsel's "clarifying" statements are not part of the designated record but are merely part of an apparent excerpt from the motion hearing appended to Mallinckrodt's brief. On

the present facts, we know of no principle of law or logic which requires us to define the explicit meaning of plaintiffs' allegations by the fractional extemporaneous remarks of plaintiffs' counsel. As we noted in our opinion, Mallinckrodt's concern can be alleviated by a motion to make plaintiffs' allegations more definite and certain.

Also, Mallinckrodt once again attempts to support some of its arguments by information which is not part of the record. Once again we note this case is before us only on the trial court's grant of Mallinckrodt's motion to dismiss plaintiffs' petition. If Mallinckrodt wishes to support its arguments by a "Brandeis Brief," it has the proper procedural devices to do so.

Finally, to allay Mallinckrodt's new concern generated by its reading of our opinion, we note that we were and are aware of the difference in potential danger between a reactor meltdown and a radioactive isotope. The present record, however, does not intimate, much less disclose, the potential danger of Mallinckrodt's operation. Our opinion remains unchanged. Strict liability is an appropriate principle for activities generating radioactive emissions. It is for Mallinckrodt to demonstrate to the trial court that its particular activities do not fall within the purview of strict liability as defined by Restatement (Second) of Torts § 520 (1977).

Motions for rehearing and for Transfer to the Supreme Court denied.

APPENDIX B

No. 67532

ED 47771

IN THE
SUPREME COURT OF MISSOURI

September Session 1985

SAMUEL F. BENNETT *et al.*,
Plaintiffs-Appellants,

vs.

TRANSFER
MALLINCKRODT, INC.,
Defendant-Respondent.

Now at this day, on consideration of Defendant-Respondent's Application to transfer the above entitled cause from the Eastern District Court of Appeals, it is ordered that said application be, and the same is hereby denied.

STATE OF MISSOURI—SCT.

I, THOMAS F. SIMON, Clerk of the Supreme Court of the State of Missouri, certify that the foregoing is a full, true and complete transcript of the judgment of said Supreme Court, entered of record at the September Session thereof, 1985, and on the 21st day of November 1985, in the above entitled cause.

Given under my hand and seal of said Court, at the City of Jefferson City, this 21st day of November, 1985.

THOMAS F. SIMON

_____ *Clerk.*

_____ *D.C.*

APPENDIX C

IN THE
CIRCUIT COURT
COUNTY OF ST. LOUIS, MISSOURI

August 18, 1983

SAMUEL F. BENNETT, *et al.*
vs.
Number 484711
Division 4
MALLINCKRODT, INC.

This matter is before the Court on Defendant's Motion to Dismiss Plaintiffs' Petition, the same having been presented, heard, ably argued and capably briefed.

The Court, being now sufficiently advised of and having considered the premises, adjudges that the Court does not have subject matter jurisdiction and Plaintiffs' Petition fails to state a claim upon which relief can be granted. Defendant's Motion to Dismiss Plaintiffs' Petition is SUSTAINED.

The August 19, 1983 setting for hearings on various motions is vacated, such motions now being moot. Costs are assessed against Plaintiffs.

cc: Brown, James & Rabbitt, P.C.
Whaley & McAuliffe

Peper, Martin, Jensen, Maichel & Hetlage
Covington & Burling

SO ORDERED

B. C. DRUMM, JR.

B. C. Drumm, Jr., Judge

APPENDIX D

The Atomic Energy Act of 1954, as amended, 42 U.S.C. § 2011 *et seq.*, provides in relevant part:

42 U.S.C. § 2013:

> It is the purpose of this Act to effectuate the policies set forth above by providing for—
>
> * * *
>
> (d) a program to encourage widespread participation in the development and utilization of atomic energy for peaceful purposes to the maximum extent consistent with the common defense and security and with the health and safety of the public;
>
> * * * *

42 U.S.C. § 2014(e):

> The term "byproduct material" means any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material.

42 U.S.C. § 2111:

> No person may transfer or receive in interstate commerce, manufacture, produce, transfer, acquire, own, possess, import, or export any byproduct material, except to the extent authorized by this section or by section 82 [42 U.S.C. § 2112]. The Commission is authorized to issue general or specific licenses to applicants seeking to use byproduct material for research or development purposes, for medical therapy, industrial uses, agricultural uses, or such other useful applications as may be developed. The Commission may distribute, sell, loan, or lease such byproduct material as it owns to qualified applicants with or without charge: Provided, however, That, for byproduct material to be distributed by the Commission for a charge, the Commission shall establish prices on such equitable basis as, in the opinion of the Commission, (a) will provide reasonable com-

pensation to the Government for such material, (b) will not discourage the use of such material or the development of sources of supply of such material independent of the Commission, and (c) will encourage research and development. In distributing such material, the Commission shall give preference to applicants proposing to use such material either in the conduct of research and development or in medical therapy. The Commission shall not permit the distribution of any byproduct material to any licensee, and shall recall or order the recall of any distributed material from any licensee, who is not equipped to observe or who fails to observe such safety standards to protect health as may be established by the Commission or who uses such material in violation of law or regulation of the Commission or in a manner other than as disclosed in the application therefor or approved by the Commission. The Commission is authorized to establish classes of byproduct material and to exempt certain classes or quantities of material or kinds of uses or users from the requirements for a license set forth in this section when it makes a finding that the exemption of such classes or quantities of such material or such kinds of uses or users will not constitute an unreasonable risk to the common defense and security and to the health and safety of the public.

42 U.S.C. § 2282(a):

(a) Any person who (1) violates any licensing provision of section 53, 57, 62, 63, 81, 82, 101, 103, 104, 107, or 109 [42 U.S.C. §§ 2073, 2077, 2092, 2093, 2111, 2112, 2131, 2133, 2134, 2137, 2139] or any rule, regulation, or order issued thereunder, or any term, condition, or limitation of any license issued thereunder, or (2) commits any violation for which a license may be revoked under section 186 [42 U.S.C. § 2236], shall be subject to a civil penalty, to be imposed by the Commission, of not to exceed $100,000 for each such violation.

APPENDIX E

The U.S. Nuclear Regulatory Commission has promulgated regulations that establish limitations on permissible exposures to radiation for the general public. These regulations provide in relevant part:

10 C.F.R. § 20.105:

> (a) There may be included in any application for a license or for amendment of a license proposed limits upon levels of radiation in unrestricted areas resulting from the applicant's possession or use of radioactive material and other sources of radiation. Such applications should include information as to anticipated average radiation levels and anticipated occupancy times for each unrestricted area involved. The Commission will approve the proposed limits if the applicant demonstrates that the proposed limits are not likely to cause any individual to receive a dose to the whole body in any period of one calendar year in excess of 0.5 rem.
>
> (b) Except as authorized by the Commission pursuant to paragraph (a) of this section, no licensee shall possess, use or transfer licensed material in such a manner as to create in any unrestricted area from radioactive material and other sources of radiation in his possession:
>
> > (1) Radiation levels which, if an individual were continuously present in the area, could result in his receiving a dose in excess of two millirems in any one hour, or
> >
> > (2) Radiation levels which, if an individual were continuously present in the area, could result in his receiving a dose in excess of 100 millirems in any seven consecutive days.

(c) In addition to other requirements of this part, licensees engaged in uranium fuel cycle operations subject to the provisions of 40 CFR Part 190, "Environmental Radiation Protection Standards for Nuclear Power Operations," shall comply with that part.

10 C.F.R. § 20.106:

(a) A licensee shall not possess, use, or transfer licensed material so as to release to an unrestricted area radioactive material in concentrations which exceed the limits specified in Appendix B, Table II of this part, except as authorized pursuant to § 20.302 or paragraph (b) of this section. For purposes of this section concentrations may be averaged over a period not greater than one year.

(b) An application for a license or amendment may include proposed limits higher than those specified in paragraph (a) of this section. The Commission will approve the proposed limits if the applicant demonstrates:

(1) That the applicant has made a reasonable effort to minimize the radioactivity contained in effluents to unrestricted areas; and

(2) That it is not likely that radioactive material discharged in the effluent would result in the exposure of an individual to concentrations of radioactive material in air or water exceeding the limits specified in Appendix B, Table II of this part.

(c) An application for higher limits pursuant to paragraph (b) of this section shall include information demonstrating that the applicant has made a reasonable effort to minimize the radioactivity discharged in effluents to unrestricted areas, and shall include, as pertinent:

(1) Information as to flow rates, total volume of effluent, peak concentration of each

radionuclide in the effluent, and concentration of each radionuclide in the effluent averaged over a period of one year at the point where the effluent leaves a stack, tube, pipe, or similar conduit;

(2) A description of the properties of the effluents, including:

(i) Chemical composition;

(ii) Physical characteristics, including suspended solids content in liquid effluents, and nature of gas or aerosol for air effluents;

(iii) The hydrogen ion concentration (pH) of liquid effluents; and

(iv) The size range of particulates in effluents released into air.

(3) A description of the anticipated human occupancy in the unrestricted area where the highest concentration of radioactive material from the effluent is expected, and, in the case of a river or stream, a description of water uses downstream from the point of release of the effluent.

(4) Information as to the highest concentration of each radionuclide in an unrestricted area, including anticipated concentrations averaged over a period of one year:

(i) In air at any point of human occupancy; or

(ii) In water at points of use downstream from the point of release of the effluent.

(5) The background concentration of radionuclides in the receiving river or stream prior to the release of liquid effluent.

(6) A description of the environmental monitoring equipment, including sensitivity of

the system, and procedures and calculations to determine concentrations of radionuclides in the unrestricted area and possible reconcentrations of radionuclides.

(7) A description of the waste treatment facilities and procedures used to reduce the concentration of radionuclides in effluents prior to their release.

(d) For the purposes of this section the concentration limits in Appendix B, Table II of this part shall apply at the boundary of the restricted area. The concentration of radioactive material discharged through a stack, pipe or similar conduit may be determined with respect to the point where the material leaves the conduit. If the conduit discharges within the restricted area, the concentration at the boundary may be determined by applying appropriate factors for dilution, dispersion, or decay between the point of discharge and the boundary.

(e) In addition to limiting concentrations in effluent streams, the Commission may limit quantities of radioactive materials released in air or water during a specified period of time if it appears that the daily intake of radioactive material from air, water, or food by a suitable sample of an exposed population group, averaged over a period not exceeding one year, would otherwise exceed the daily intake resulting from continuous exposure to air or water containing one-third the concentration of radioactive materials specified in Appendix B, Table II of this part.

(f) The provisions of paragraphs (a) through (e) of this section do not apply to disposal of radioactive material into sanitary sewerage systems, which is governed by § 20.303.

(g) In addition to other requirements of this part, licensees engaged in uranium fuel cycle operations subject to the provisions of 40 CFR Part 190, "Environmental Radiation Protection Standard for Nuclear Power Operations," shall comply with that part.

(2)

Supreme Court, U.S.
FILED
MAY 16 1986
JOSEPH F. SPANIOL, JR.
CLERK

No. 85-1710

IN THE

Supreme Court of the United States

OCTOBER TERM, 1985

MALLINCKRODT, INC.,
Petitioner,

vs.

SAMUEL F. BENNETT, *et al.*,
Respondents.

On Petition For Writ of Certiorari to the
Missouri Court of Appeals, Eastern District

BRIEF OF RESPONDENT IN OPPOSITION TO PETITION FOR WRIT OF CERTIORARI

DONALD H. WHALEY
WHALEY & MCAULIFFE
7777 Bonhomme Avenue
Clayton, Missouri 63105
(314) 726-6060

DONALD L. JAMES
BROWN, JAMES & RABBITT, P.C.
705 Olive Street, Suite 1100
St. Louis, Missouri 63101
(314) 421-3400

Attorneys for Respondents

St. Louis Law Printing Co., Inc., 411 No. Tenth Street 63101 314-231-4477

TABLE OF CONTENTS

	Page
Table of Authorities	i
Reasons for Denying the Petition	1
Conclusion	3

TABLE OF AUTHORITIES

Cases:

Cox Broadcasting v. Cohn, 420 U.S. 469	2
Silkwood v. Kerr-McGee Corp., 464 U.S. 238	2,3
Samuel F. Bennett v. Mallinckrodt, Inc., 698 S.W.2d 854 (Mo. App. 1985)	3

No. 85-1710

IN THE

Supreme Court of the United States

OCTOBER TERM, 1985

MALLINCKRODT, INC.,
Petitioner,

vs.

SAMUEL F. BENNETT, *et al.*,
Respondents.

On Petition For Writ of Certiorari to the
Missouri Court of Appeals, Eastern District

BRIEF OF RESPONDENT IN OPPOSITION TO PETITION FOR WRIT OF CERTIORARI

REASONS FOR DENYING THE PETITION

This case is still in the pleading stage, and hence there has been no final judgment for purposes of review by this Court.

In addition, this Court has previously addressed the issue presented by Petitioner, and has held that state tort law is a valid remedy for compensating victims of nuclear exposure, and is neither preempted by, nor in conflict with, federal law.

A. A Legal Dispute Which Is Still In The Pleading Stages And Which Thus Presents No Clearly Defined Record For Review Is Not Ripe For Purposes Of Adjudication By This Court.

Mallinckrodt's Petition for a Writ of Certiorari in this case should be denied because as of yet there is still no clearly defined record upon which this Court could base a ruling.

It is a firmly established principle of this Court that this Court's jurisdiction to review a state court's decision is generally limited to a final judgment rendered by the highest court of the state in which a decision may be had. 28 U.S.C. §1257, *Cox Broadcasting v. Cohn,* 420 U.S. 469.

There has been no final judgment in this case, rather the relationship between the parties is still in the pleading stage. Although the plaintiffs brought their action in 1983, Mallinckrodt has yet to file either an answer to the plaintiffs' complaint or a motion for summary judgment based upon facts established by affidavit or discovery. Instead, Mallinckrodt has attempted by a variety of means to forestall an adjudication of the merits of this case.

Mallinckrodt has based its Petition for a Writ of Certiorari on no more than bald assertions set forth in its motion to dismiss plaintiffs' complaint and in this Petition Mallinckrodt is, in effect, seeking an opinion from this Court before either pleading or proving compliance with the federal statutes under which it seeks protection.

B. State Tort Law Which Compensates Victims Of Nuclear Exposure Is A Valid Remedy That Is Neither In Conflict With, Nor Preempted By Federal Law.

Mallinckrodt's Petition should be denied because the legal issue raised in this case has already been settled by this Court in *Silkwood v. Kerr-McGee Corp.,* 464 U.S. 238.

The issue underpinning this case is whether a state tort remedy authorizing an award of damages against a federally licensed nuclear facility for conduct related to nuclear hazards is available to those injured by nuclear exposure.

This Court, in *Silkwood,* 464 U.S. at 625-626, held that such a remedy is indeed available to victims of nuclear exposure, and that such remedy is neither in conflict with, nor preempted by federal law. In addition, the *Silkwood* decision, as applied to Missouri tort law, has already been afforded a well-reasoned and exhaustive analysis in *Samuel F. Bennett v. Mallinckrodt, Inc.,* 698 S.W.2d 854 (Mo. App. 1985).

Thus, in pursuing its argument of federal preemption in this case, Mallinckrodt is merely rehashing issues resolved by this Court in *Silkwood.*

CONCLUSION

The Petition for a Writ of Certiorari should be denied.

Respectfully submitted,

Donald H. Whaley
Whaley & McAuliffe
7777 Bonhomme Avenue
Clayton, Missouri 63105
(314) 726-6060

Donald L. James
Brown, James & Rabbitt, P.C.
705 Olive Street, Suite 1100
St. Louis, Missouri 63101
(314) 421-3400

Attorneys for Respondents

MOTION FILED
MAY 1 6 1986

(3)

No. 85-1710

IN THE
Supreme Court of the United States
OCTOBER TERM, 1985

MALLINCKRODT, INC.,
Petitioner,

v.

SAMUEL F. BENNETT, *et al.*,
Respondents.

On Petition for a Writ of Certiorari to the Missouri Court of Appeals, Eastern District

---

Motion for Leave to File A Brief As *Amicus Curiae* and Brief of the American College of Radiology As *Amicus Curiae* In Support of the Petition

---

PAUL G. GEBHARD
Counsel of Record
KEVANN M. COOKE
VEDDER, PRICE, KAUFMAN
& KAMMHOLZ
115 S. LaSalle Street
Chicago, IL 60603
(312) 781-2200
Counsel for Amicus Curiae

CHAS. P. YOUNG COMPANY

16 pp

IN THE

Supreme Court of the United States

OCTOBER TERM, 1985

No. 85-1710

MALLINCKRODT, INC.,
Petitioner,

v.

SAMUEL F. BENNETT, *et al.*,
Respondents.

On Petition for a Writ of Certiorari to the Missouri Court of Appeals, Eastern District

Motion of the American College of Radiology for Leave to File A Brief As *Amicus Curiae* In Support of the Petition

The American College of Radiology ("College") hereby requests, pursuant to Rule 36 of the Rules of this Court, leave to file the accompanying brief as *amicus curiae* in support of petitioner.[1] The *amicus* College is an organization of approximately 15,000 United States physicians and radiological physicists who are specialists in radiology, the majority of whom practice nuclear radiology. Low-level ionizing radiation from the types of radionuclides produced by petitioner is used by nuclear radiologists in the diagnosis and treatment of disease. Medical use of radionuclides by a member of the College requires the user to have a specific license from the Nuclear

[1] Pursuant to Rule 36, *amicus* has obtained the written consent of the petitioner, but was denied consent to file by respondents. Petitioner's letter of consent has been filed with the Clerk of the Court.

Regulatory Commission for human use of byproduct material issued pursuant to 10 C.F.R. § 35.12. The regulatory scheme governing medical use of radionuclides is uniquely extensive, detailed and prescriptive. Members of the College practice nuclear radiology in all of the states. They believe that the medical benefits of nuclear radiology should be equally available to the citizens of all of the states, without limitation resulting from differing standards of safety imposed by varying formulations of state tort liability law and federal regulation. The American College of Radiology believes that its views as *amicus* will assist the Court in deciding whether actions under state tort law for alleged economic loss due to radiation should be barred by adherence to federally-mandated safety standards.

The *amicus* American College of Radiology therefore prays that its motion for leave to file a brief in support of the petitioner be granted.

Respectfully submitted,

PAUL G. GEBHARD
Counsel of Record
KEVANN M. COOKE
VEDDER, PRICE, KAUFMAN
& KAMMHOLZ
115 S. LaSalle Street
Chicago, Illinois 60603
(312) 781-2200
Counsel for Amicus Curiae

May 19, 1986

QUESTION PRESENTED

Amicus Curiae will address the following question:

Is a state law tort action preempted by the Atomic Energy Act, 42 U.S. § 2011 *et seq.*, when the defendant has operated in compliance with all relevant safety standards established by the Nuclear Regulatory Commission?

TABLE OF CONTENTS

	Page
MOTION	i
QUESTION PRESENTED	iii
INTEREST OF THE AMICUS CURIAE	1
FACTS OF THE CASE	3
REASONS FOR GRANTING THE PETITION	4
CONCLUSION	9

TABLE OF AUTHORITIES

Cases:	Page
Bennett v. Mallinckrodt, 698 S.W. 2d 854 (Mo. Ct. App. 1985)	3
Chicago and Northwestern Transportation Company v. Kalo Brick and Tile Company, 450 U.S. 311 (1981)	7
Cipollone v. Liggett Group, 593 F.Supp. 1146 (D.N.J. 1984) *rev'd in part*, slip op. Nos. 84-5073 and 84-5074 (3rd Cir. February 13, 1986)	3
Fidelity Federal Savings & Loan Association v. De La Cuesta, 458 U.S. 141 (1982)	7
San Diego Building Trades v. Garmon, 359 U.S. 236 (1959)	7
Silkwood v. Kerr-McGee, 464 U.S. 238 (1984)	4, 8
Statutes:	
33 U.S.C. §1251	6
33 U.S.C. §1370	6
42 U.S.C. §2011	2
42 U.S.C. §2014	4
42 U.S.C. §2021	4, 5
42 U.S.C. §2134	7
42 U.S.C. §7401	6
42 U.S.C. §7416	6
10 C.F.R. §31	2, 6
10 C.F.R. §35	2, 6
Miscellaneous:	
S. Rep. No. 870 86th Cong., 1st Sess. reprinted in 1959 U.S. Code Cong. & Ad News 2872	6, 7
Radiation Experience Data (RED), Documentation and Results of the 1980 Survey of U.S. Hospitals, HHS Publication FDA 86-8253, September 1985	2

IN THE

Supreme Court of the United States

OCTOBER TERM, 1985

No. 85-1710

MALLINCKRODT, INC.,
Petitioner,

v.

SAMUEL F. BENNETT, *et al.*,
Respondents.

On Petition for a Writ of Certiorari to the Missouri Court of Appeals, Eastern District

---

BRIEF OF THE AMERICAN COLLEGE OF RADIOLOGY AS *AMICUS CURIAE* IN SUPPORT OF THE PETITION

INTEREST OF *AMICUS CURIAE*

The American College of Radiology ("College") is a non-profit, California corporation founded in 1924 to advance the science of radiology, improve radiologic service to the patient, study the socioeconomic aspects of the practice of radiology, and encourage improved and continuing education for radiologists and allied professional fields. The College has approximately 15,000 members, a number of whom use radionuclides in the practice of nuclear radiology or conduct research in that discipline. Physicians who utilize radionuclides must obtain a license from the Nuclear Regulatory Commission

("NRC") and comply with extensive prescriptive regulations governing the use of radionuclides in the diagnosis and treatment of disease. 10 C.F.R. parts 31 and 35 (1985).

In the decision for which certiorari is sought here, the Missouri Court of Appeals held that a tort action alleging personal injuries to a class of plaintiffs who worked near a radiopharmaceutical processing facility of petitioner was not preempted, despite the fact that there was no allegation that there had been any occurrence which had violated NRC regulations. The members of the College, who are currently faced with great difficulty and expense in obtaining professional liability insurance coverage under existing rules of law, are understandably very apprehensive about the impact of the Missouri decision upon the continued availability of such insurance for the millions of nuclear radiology procedures carried out on patients in hospitals throughout the country in compliance with federal regulations.[1] A billion-dollar class action against a manufacturer of radionuclides operating within federal regulations can easily be followed by a similar class action by patients against a hospital and its physicians who employ radionuclides within federal regulatory standards. Insurers are well aware of this possibility. If such insurance becomes unavailable or prohibitively expensive, physicians will be forced to discontinue such procedures and patients will be the real losers, a result which should not be ascribed to the intent of Congress in enacting the Atomic Energy Act of 1954, 42 U.S.C. § 2011 *et seq.* or subsequent legislation.

---

[1] In 1980, the most recent year for which published data are available, an estimated 6.4 million in-vivo nuclear medicine procedures were performed in U.S. hospitals, a procedure rate of 2.8 per 100 persons. *Radiation Experience Data (RED), Documentation and Results of the 1980 Survey of U.S. Hospitals*, HHS Publication FDA 86-8253, September 1985.

Of even more immediate concern is the question of whether the manufacturers of radionuclides, like the manufacturers of certain types of vaccines, will be forced by tort liability concerns to abandon production, a result which would surely frustrate federal policy and purpose. The probable impact of the decision of the Missouri Court of Appeals upon the practice of nuclear radiology and medicine and upon patients in all of the states ought to be carefully considered by this Court in determining whether to grant the petition. The American College of Radiology, as *amicus*, respectfully requests this opportunity to present its concerns on these issues to the Court.

THE FACTS OF THE CASE

Plaintiff-respondents allege that they represent a class of persons who work adjacent to petitioner's Missouri plant which processes radionuclides for medical use. They allege personal injuries under common law tort theories and claim damages to the members of the class of one billion dollars. The Circuit Court of St. Louis County dismissed on grounds of lack of subject matter jurisdiction and failure to state a claim on which relief could be granted.

The Missouri Court of Appeals reversed. The court reasoned that there was no irreconcilable conflict between federal regulation and "state standards," (apparently referring to state standards yet to be defined on an *ad hoc* basis by juries in tort actions), because it was theoretically possible to both operate within federal regulatory standards and to pay tort damages under state law. The court candidly admitted that "This reasoning may appear to be disingenuous and smack of sophistry . . ." *Bennett v. Mallinckrodt*, 698 S.W. 2d at 860 (1985). In support of its conclusion the court twice cited the District Court opinion in *Cipollone v. Liggett Group*, 593 F.Supp. 1146 (D.N.J. 1984), since reversed in part in *Cipollone v. Liggett Group*, slip op. Nos. 84-5073 and

84-5074 (February 13, 1986). It also considered that there was no frustration of federal objectives in permitting state tort actions, a conclusion it reached without adequate analysis of the probable result of permitting such actions against licensees who were in compliance with federal standards. The court finally concluded that the terms "nuclear incident" and "occurrence" in 42 U.S.C. § 2014(q) must be read to include any claimed cause and effect relationship arising out of the existence of radionuclides. Throughout, the Missouri Court relied upon its reading of this Court's opinion in *Silkwood v. Kerr-McGee Corp.*, 464 U.S. 238 (1984) relating to an award of punitive damages.

REASONS FOR GRANTING THE PETITION

The relevant Congressional purpose in enacting the 1959 amendments to the Atomic Energy Act is set forth in 42 U.S.C. § 2021 as follows:

> § 2021.
>
> (a) It is the purpose of this section—
>
> * * *
>
> (3) to promote an orderly regulatory pattern between the Commission and State governments with respect to nuclear development and use and regulation of byproduct, source, and special nuclear materials;
>
> * * *
>
> (5) to provide for coordination of the development of radiation standards for the guidance of Federal agencies and cooperation with the States; and
>
> * * *
>
> (b) Except as provided in subsection (c) of this section, the Commission is authorized to enter into

agreements with the Governor of any State providing for discontinuance of the regulatory authority of the Commission under subchapters V, VI, and VII of this chapter, and section 2201 of this title, with respect to any one or more of the following materials within the State—

(1) byproduct materials;

(2) source materials;

(3) special nuclear materials in quantities not sufficient to form a critical mass.

During the duration of such an agreement it is recognized that the State shall have authority to regulate the materials covered by the agreement for the protection of the public health and safety from radiation hazards.

* * *

(d) The Commission shall enter into an agreement under subsection (b) of this section with any State if—

(1) The Governor of that State certifies that the State has a program for the control of radiation hazards adequate to protect the public health and safety with respect to the materials within the State covered by the proposed agreement, and that the State desires to assume regulatory responsibility for such materials; and

(2) the Commission finds that the State program is compatible with the Commission's program for the regulation of such materials, and that the State program is adequate to protect the public health and safety with respect to the materials covered by the proposed agreement.

Pursuant to the authority granted by Section 2021, the NRC has entered into agreements with 26 states to

enforce state safety regulations which are consistent with the NRC standards. Missouri is not such a state.

Public concern over the unique physical and biological properties of radioactive materials, including radionuclides, and their concomitant promise of great public benefit led to the unique regulatory system embodied in the Atomic Energy Act, the subsequent amendatory legislation, and the safety standards embodied in the regulations issued by the NRC. These safety standards as they apply to medical radionuclides are also unique, among all bodies of federal regulation of medical activity, in their comprehensiveness, detail and prescriptive effect. 10 C.F.R. parts 31 and 35 (1985). If the Congress had intended the states to be able to impose inconsistent, more stringent safety standards, it could certainly have done so explicitly as it has in other statutes creating regulatory schemes.[2] In explaining what was intended by the requirement of the Act for consistency, the Joint Committee stated:

> "5. The Joint Committee believes it important to emphasize that the radiation standards adopted by States under the agreements of this bill should either be *identical* or *compatible* with those of the Federal Government. For this reason the committee removed the language 'to the extent feasible' in subsection g. of the original AEC bill considered at hearings from May 19 to 22, 1959. The committee recognizes the importance of the testimony before it by numerous witnesses of the dangers of *conflicting*,

[2] In the Clean Air Act, 42 U.S.C. § 7401 *et seq.*, as well as the Federal Water Pollution Control Act, 33 U.S.C. § 1251 *et seq.*, states were granted express authority to impose their own standards to regulate the emission of air and water pollutants respectively. The Federal Water Pollution Control Act provides: "nothing in this chapter shall (1) preclude or deny the right of any state or political subdivision thereof or interstate agency to adopt or enforce (A) *any standard* or limitation respecting discharges of pollutants, . . ." (emphasis added). 33 U.S.C. § 1370. See also, 42 U.S.C. § 7416.

> *overlapping and inconsistent standards in different jurisdictions,* to the hinderance of industry and jeopardy of public safety." (emphasis added). S.Rep. No. 870, 86th Cong., 1st Sess. reprinted in 1959 U.S. Code Cong. & Ad News 2872, 2979.

If the petition for certiorari is not granted and the preemption issues are not thoroughly examined by this Court, the practical effect of the Missouri decision will be exactly what the Congress wished to avoid, i.e. "... conflicting, overlapping and inconsistent standards in different jurisdictions ...", established by *ad hoc* jury verdicts.

This Court has held on several occasions that state law damage claims have a regulatory effect which potentially frustrates congressional objectives and national policies. *Fidelity Federal Savings & Loan Association v. De la Cuesta,* 458 U.S. 141 (1982); *Chicago and Northwestern Transportation Company v. Kalo Brick and Tile Company,* 450 U.S. 311, 326 (1981); *San Diego Building Trades Council v. Garmon,* 359 U.S. 236, 246 (1959). The threat of tort actions and jury verdicts as a mechanism for establishing a "state standard" in each of the 50 states for nuclear physicians, patients, hospitals and insurers, with all of the uncertainty, expense and delay which attends such extensive litigation, may well result in curtailment of highly useful nuclear medical services now available to the public.

The Congressional intent with respect to the availability of nuclear medicine services is made explicit in 42 U.S.C. § 2134(a);

> § 2134.
>
> (a) The Commission is authorized to issue licenses to persons applying therefor for utilization facilities for use in medical therapy. In issuing such licenses the Commission is directed *to permit the widest amount of effective medical therapy possible with the amount of special nuclear material available for*

> *such purpose* and to impose the minimum amount of regulation consistent with its obligations under this chapter to promote the common defense and security and to protect the health and safety of the public. (emphasis supplied).

The present NRC standards, which in the absence of an agreement with Missouri are applicable in that state, permit "the widest amount of effective medical therapy possible". The carefully elaborated, highly specific federal regulatory system of the NRC has worked extremely well for the public of medical patients. This fact, in addition to the unique nature of the problems it addresses, argues that it deserves special consideration from this Court. The decision of the Missouri Court of Appeals, based upon reasoning about which it candidly expressed its own concern, is seriously deficient in failing to consider the practical consequences of the rule it prescribes. To ignore such consequences, which will effectively frustrate the objectives of the federal law and wholly subvert the federal regulatory scheme by permitting the substitution of state-determined safety standards, is surely not a "regulatory consequence . . . that Congress was quite willing to accept." *Silkwood*, 464 U.S. at 256.

If the analysis of the Missouri Court is correct, this Court should grant certiorari and affirm that opinion so that the medical community and patients can avoid expensive and protracted litigation on the same tort issues in each of the other states, and can seek appropriate Congressional clarification. It will ill serve the population of medical patients to be required to await a conflict among lower courts for a resolution of the pervasive preemption issues presented by this case.

This case presents this Court with an opportunity to draw a distinction between the right of a state to assess punitive damages in the event of violation of federal standards, established in *Silkwood*, and the effect of the

federal legislation in preempting a private tort remedy in the absence of violation of federal regulatory standards. Such a distinction would be consistent with *Silkwood*, and would preserve both punitive damages and the possibility of state law tort damages. It would have the effect of permitting the "widest amount of effective medical therapy" while reenforcing the desirability of performance within the federal safety standards.

CONCLUSION

For the foregoing reasons, the petition for a writ of certiorari should be granted.

Respectfully submitted,

PAUL G. GEBHARD
Counsel of Record
KEVANN M. COOKE
VEDDER, PRICE, KAUFMAN
& KAMMHOLZ
115 S. LaSalle Street
Chicago, Illinois 60603
(312) 781-2200
Counsel for Amicus Curiae

MOTION FILED
MAY 19 1986

No. 85-1710

IN THE
Supreme Court of the United States
OCTOBER TERM, 1985

MALLINCKRODT, INC.,
Petitioner,
v.
SAMUEL F. BENNETT, *et al.*,
Respondents.

On Petition for a Writ of Certiorari to the Missouri Court of Appeals, Eastern District

---

MOTION OF SYNCOR INTERNATIONAL CORPORATION FOR LEAVE TO FILE A BRIEF AS *AMICUS CURIAE* AND BRIEF OF SYNCOR INTERNATIONAL CORPORATION AS *AMICUS CURIAE* IN SUPPORT OF PETITIONER

ROBERT G. PINCO *
MICHAEL H. SELTER
ROBERT E. POKUSA
ANN K. POLLOCK
FINLEY, KUMBLE, WAGNER,
HEINE, UNDERBERG, MANLEY,
MYERSON & CASEY
1140 Connecticut Avenue, N.W.
Washington, D.C. 20036
(202) 659-8300
Counsel for Amicus Curiae
Syncor International Corporation

* Counsel of Record

May 19, 1986

WILSON - EPES PRINTING CO., INC. - 789-0096 - WASHINGTON, D.C. 20001

TABLE OF AUTHORITIES

STATUTES: Page

Atomic Energy Act of 1954, Pub. L. No. 53-703, 68 Stat. 919, as amended, 42 U.S.C. § 2011 *et seq.* 3
42 U.S.C. § 2014(e) and (aa) 1
42 U.S.C. § 2021(b) 2
42 U.S.C. §§ 2771-2284 3

ADMINISTRATIVE REGULATIONS:

10 C.F.R. § 8.4(j) 2
10 C.F.R. § 20.1(c) 3
10 C.F.R. §§ 20.101-106 and Appendix B 3
10 C.F.R. Part 20 3
10 C.F.R. Part 35 3

IN THE

Supreme Court of the United States

OCTOBER TERM, 1985

No. 85-1710

MALLINCKRODT, INC.,
Petitioner,

v.

SAMUEL F. BENNETT, *et al.*,
Respondents.

On Petition for a Writ of Certiorari to the Missouri Court of Appeals, Eastern District

MOTION OF SYNCOR INTERNATIONAL CORPORATION FOR LEAVE TO FILE A BRIEF AS *AMICUS CURIAE*

Pursuant to Rule 36.1 of the Rules of the Supreme Court of the United States, Syncor International Corporation ("Syncor") respectfully moves for leave to file, as *amicus curiae*, the attached brief in support of the petition of Mallinckrodt, Inc. for a writ of certiorari. Mallinckrodt's attorneys have given their consent. The attorneys for the respondents have refused to consent.

Syncor operates 74 nuclear pharmacies in 31 states. Nuclear pharmacies prepare and dispense radiopharmaceuticals for human use. In this respect, the pharmacies are similar to conventional pharmacies that dispense prescription drugs. Nuclear pharamacies are unique, however, because the prescription products they dispense are radiopharmaceuticals—radioactive drugs used in the diagnosis and therapeutic treatment of diseases. Radiopharmaceuticals are compounded with "byproduct materials," [1] and are then transported to nuclear medicine

[1] Byproduct materials are radionuclides which are produced as a result of a sustained nuclear reaction. *See* 42 U.S.C. § 2014(e) and (aa).

departments at surrounding hospitals and clinics. Because of their highly perishable nature, radiopharmaceuticals must be available to nearby hospitals for immediate use. Independent nuclear pharmacies, including those operated by Syncor, supply a majority of all radiopharmaceutical drug products used in the United States.

Because their unique characteristics and imaging properties enable doctors to detect and treat early stages of abnormalities and diseases such as cancer, arthritis, tuberculosis and thyroid dysfunctions, radiopharmaceuticals have become an increasingly important component of the health care arsenal. These drugs also help physicians diagnose and treat people who suffer serious or life-threatening traumatic injuries (e.g., automobile crashes) and heart atacks. In fact, failure to use appropriate radiopharmaceuticals would constitute malpractice under the generally prevailing standard in most jurisdictions. Last year, radiopharmaceuticals were used to treat or diagnose over seven million patients.

Since radiopharmaceutical drug products are intended to be ingested or injected into the human body, they contain extremely low levels of radioactivity. Still, each pharmacy operated by Syncor is required to maintain a license from the Nuclear Regulatory Commission ("NRC") or an agreement state [2] and comply with the comprehensive array of federal safety regulations, including those covering the release and concentration of

---

[2] An agreement state is any state with which the NRC has entered into an effective agreement under Subsection 274b of the Atomic Energy Act, as amended, 42 U.S.C. § 2021(b). The agreements give the states limited authority to license and inspect certain nuclear facilities, and require the states to "use their best efforts to assure that their regulatory programs for protection against radiation hazards will continue to be compatible with the AEC's [now NRC's] program for the regulation of byproduct, source and special nuclear material." 10 C.F.R. § 8.4(j). The AEC (Atomic Energy Commission) was the agency that preceded the NRC.

BEST AVAILABLE COPY

radionuclides both inside and outside of a licensed facility. *See* 10 C.F.R. § 20.101-106 and Appendix B (1985). *See also* 10 C.F.R. Parts 20 and 35.

These regulations were issued by the NRC pursuant to the Atomic Energy Act (the "Act" or "Atomic Energy Act"), 42 U.S.C. § 2011 *et seq.*, which Congress passed in 1954 to encourage private industry in the development of nuclear technology for peaceful purposes. Under the Act, the NRC was delegated the sole responsibility for promulgating standards and regulations to ensure that nuclear facilities complied with the stringent criteria necessary to warrant safe operations in this technically complex field. The regulations devised under this broad delegation of authority cover every conceivable aspect of a licensee's operations, including the permissible levels for exposure and emissions, uses of radioactive materials and the disposal of radioactive wastes.[3]

As a licensed user of radionuclides, Syncor is vitally interested in the decision of the Missouri Court of Appeals.[4] The decision upsets Congress' carefully constructed federal regulatory scheme by permitting the states to impose, through *ad hoc* and possibly inconsistent jury verdicts, additional and more stringent safety standards on federally licensed facilities, regardless of whether such licensees limit radioactive emissions to levels lower than those approved in the comprehensive federal regulations. If the decision is allowed to stand, Syncor and other users, despite full compliance with the federal standard that emissions be "as low as is reasonably achievable," 10 C.F.R. § 20.1(c), may

---

[3] In order to enforce compliance with this comprehensive regulatory scheme, Congress authorized the NRC to impose civil penalties, to revoke licenses and to seek injunctive relief for intentional or accidental violations of these regulations. In addition, Congress authorized criminal sanctions for willful violations of the Atomic Energy Act or the NRC's implementing regulations. 42 U.S.C. §§ 2771-2284.

[4] The decision is reported at 698 S.W. 2d 854 and reprinted in Appendix A to the Petition for Writ of Certiorari ("Pet. App.").

nevertheless be liable for compensatory and punitive damages for injuries allegedly caused by exposure to emission levels of radioactivity that are approved by the NRC.

Moreover, the pharmacies operated by Syncor and other similarly situated licensees such as hospital nuclear medicine departments are end users of byproduct materials rather than large-scale manufacturers. As such, they are not in a position to "pay the piper", as the Missouri Court of Appeals suggests (Pet. App. at 8a), in order to continue producing radiopharmaceuticals for medical use. Syncor's insurance costs will undoubtedly rise and if settlements or damage awards based on the Missouri court's decision become sufficiently large, Syncor in the future may not reasonably be able to afford the level of insurance protection needed. The lower court's decision therefore will not only have adverse effects on Syncor and similar users of nuclear materials but may also result in the curtailed use and availability of these valuable diagnostic and treatment tools.

For the reasons set forth above, Syncor respectfully requests permission to file the attached brief as *amicus curiae* in support of Mallinckrodt's petition for a writ of certiorari.

Respectfully submitted,

ROBERT G. PINCO *
MICHAEL H. SELTER
ROBERT E. POKUSA
ANN K. POLLOCK
FINLEY, KUMBLE, WAGNER,
HEINE, UNDERBERG, MANLEY,
MYERSON & CASEY
1140 Connecticut Avenue, N.W.
Washington, D.C. 20036
(202) 659-8300
Counsel for Amicus Curiae
Syncor International Corporation

May 19, 1986

* Counsel of Record

QUESTION PRESENTED

Whether a radiopharmaceutical facility can, consistently with the federal preemption of the field of nuclear safety, be held liable for alleged injuries due to emissions of radiation at levels permitted by federal law.

TABLE OF CONTENTS

	Page
INTEREST OF SYNCOR INTERNATIONAL CORPORATION	1
SUMMARY OF ARGUMENT	4
REASONS FOR GRANTING THE WRIT	5
I. THE DECISION BELOW EFFECTIVELY EMPOWERS THE STATES TO ESTABLISH THEIR OWN RADIATION EMISSION STANDARDS DESPITE FEDERAL PREEMPTION OF THE FIELD OF NUCLEAR SAFETY	6
II. THE DECISION BELOW CREATES AN IRRECONCILABLE CONFLICT WITH FEDERAL NUCLEAR SAFETY STANDARDS AND FRUSTRATES THE GOALS AND OBJECTIVES OF THE ATOMIC ENERGY ACT	9
A. The decision of the court below would create an irreconcilable conflict with federal nuclear safety standards	9
B. The decision will frustrate the goals and objectives of the Atomic Energy Act	10
CONCLUSION	14

TABLE OF AUTHORITIES

CASES: Page

Cipollone v. Liggett Group, Inc., Nos. 85-5073, 85-5074 (3d Cir., decided April 7, 1986) 8
Duke Power Company v. Carolina Environmental Study Group, 438 U.S. 59, 57 L.Ed. 2d 595, 98 S. Ct. 2620 (1978) 10
McKay v. United States, 703 F.2d 464 (10th Cir. 1983) 8
Pacific Gas & Electric Co. v. State Energy Resources Commission, 461 U.S. 190, 75 L. Ed. 2d 752, 103 S. Ct. 1713 (1983) 6, 12
San Diego Building Trades Council v. Garmon, 359 U.S. 236, 3 L.Ed. 2d 775, 79 S. Ct. 773 (1959) 7
Silkwood v. Kerr-McGee Corp., 464 U.S. 238, 78 L.Ed. 2d 443, 104 S. Ct. 615 (1984) ..... *passim*
Silkwood v. Kerr-McGee Corp., 667 F.2d 908 (10th Cir. 1981) 8
Van Dissel v. Jersey Central Power & Light Company, 476 A.2d 310 (N.J. 1984) 8
Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., 435 U.S. 519, 55 L.Ed. 2d 460, 98 S. Ct. 1197 (1978) 11

STATUTES:

Atomic Energy Act of 1954, Pub. L. No. 53-703, 68 Stat. 919, as amended, 42 U.S.C. § 2011 *et seq.* 13
Federal-State Act, Pub. L. No. 86-373, 73 Stat. 688, as amended, 42 U.S.C. § 2021 *et seq.* 6
Price Anderson Act, Pub. L. No. 85-256, 71 Stat. 576, as amended, 42 U.S.C. § 2210 *et seq.* 11, 12

ADMINISTRATIVE REGULATIONS:

10 C.F.R. § 20.1(c) 11
10 C.F.R. §§ 20.101-106 and Appendix B 1, 3
10 C.F.R. Part 20 3
10 C.F.R. Part 35 3

TABLE OF AUTHORITIES—Continued

LEGISLATIVE MATERIALS: Page

H.R. Rep. No. 1125, 86th Cong. 1st Sess. 3 (1959) .. 7
1959 U.S. Code Congressional and Administrative News, v. 2, p. 2879 6
S. 2046, 99th Cong., 2d Sess. (1986) 13
H.R. 4385, 99th Cong., 2d Sess. (1986) 13
H.R. 4460, 99th Cong., 2d Sess. (1986) 13

OTHER AUTHORITIES:

Saha, *Fundamentals of Nuclear Pharmacy* (2d Ed. 1983) 2
Reid, *The Liability Crisis,* The Washington Post, Feb. 23-25, 1986 13

IN THE

Supreme Court of the United States

OCTOBER TERM, 1985

No. 85-1710

MALLINCKRODT, INC.,

Petitioner,

v.

SAMUEL F. BENNETT, *et al.*,

Respondents.

On Petition for a Writ of Certiorari to the Missouri Court of Appeals, Eastern District

---

BRIEF OF SYNCOR INTERNATIONAL CORPORATION AS *AMICUS CURIAE* IN SUPPORT OF PETITIONER

INTEREST OF SYNCOR INTERNATIONAL CORPORATION

This case presents a substantial question of law concerning the doctrine of federal preemption of the emission standards for licensed users of nuclear materials. The decision by the Missouri Court of Appeals, if left undisturbed, would effectively permit the states to set emission standards lower than the federal emission standards promulgated by the Nuclear Regulatory Commission ("NRC"), 10 C.F.R. §§ 20.101-106, and thereby disrupt the comprehensive regulatory scheme established by Congress. Because the emission standards at issue apply equally to all licensed nuclear facilities, the decision will affect not only the petitioner but every user of nuclear materials from power plants to hospital nuclear medicine departments. Thus, Syncor International Corporation

("Syncor"), whose nuclear pharmacies compound diagnostic and treatment radiopharmaceuticals for medical use,[1] is directly and vitally affected by the decision below. Pet. App. at 1a, 698 S.W.2d 854 (Mo. Ct. App. 1985).[2]

Independent nuclear pharmacies, including those operated by Syncor, prepare and dispense daily dosage forms of radiopharmaceutical drugs, which are then transported to nuclear medicine departments at surrounding hospitals and clinics. The radiopharmaceuticals are compounded with "byproduct materials," which are materials that are made radioactive as a result of a sustained nuclear reaction. The radionuclides in these drugs decay naturally over a period of hours so that the drug products cannot be effectively stored for later use or transported over a long distance.[3] It is essential therefore that these highly perishable drugs be available for immediate use by physicians.[4] Accordingly, nuclear pharmacies must be located within a particular hospital or in close proximity to a group of hospitals.

Radiopharmaceuticals aid in the diagnosis and treatment of diseases of the central nervous system, thyroid, lungs, liver, spleen, pancreas, kidney, skeleton and heart.[5]

---

[1] Syncor maintains 74 nuclear pharmacies in 31 states. Of these operations, some are licensed by the NRC and others are licensed by agreement states as medical distributors of radiopharmaceutical drug products. See footnote 2 in Motion of Syncor for explanation of agreement states.

[2] "Pet. App." denotes the appendix to the Petition for Writ of Certiorari.

[3] The time period in which a given radionuclide will decay is called the physical half-life. The physical half-life of the most commonly used diagnostic radiopharmaceutical is six hours.

[4] In specific terms, it should be noted that it would be impractical for hospitals in the State of Missouri to be serviced by a nuclear pharmacy in another state.

[5] A description of the basic nature and use of radiopharmaceutical drug products may be found in Saha, *Fundamentals of Nuclear Pharmacy* (2d Ed. 1983).

Moreover, these drugs when used as diagnostic radiopharmaceuticals assist doctors in saving the lives of people who sustain serious or even life-threatening traumatic injuries and heart attacks. The drugs therefore have become essential weapons against diseases and injuries and are widely used in the health care field.

Since radiopharmaceutical drug products are intended to be ingested or injected into the human body, they contain extremely low levels of radioactivity.[6] Still, each pharmacy operated by Syncor is required to maintain a license from the NRC or an agreement state and comply with the vast array of federal safety regulations, including those covering the release and concentration of radionuclides both within and outside of a licensed facility. *See* 10 C.F.R. § 20.101-106 and Appendix B. *See also* 10 CF.R. Part 20 and Part 35.

The NRC's comprehensive federal safety standards serve to protect the general public against the health risks associated with the use of nuclear materials.[7] They also establish a benchmark against which licensees may measure their operations. Nuclear pharmacies, hospital nuclear medicine departments and other users of nuclear energy have a vital interest in the continued applicability of uniform federal safety regulations. However, the decision of the Missouri Court of Appeals, by authorizing the imposition of tort liability on a licensee complying with federal regulations, threatens to destroy the uniformity and certainty established by the federal regulations. If nuclear safety standards are set by random and potentially inconsistent jury decisions, a licensed nuclear facility will be unable to predict the level at which potentially

---

[6] The dose of radioactivity contained in a typical diagnostic radiopharmaceutical is roughly equivalent to the amount of radioactivity contained in one chest x-ray.

[7] The NRC's maximum permissible dose regulations are largely adopted from the recommendations of the National Council on Radiation Protection and Measurement and are set far below a level where adverse health effects are known to occur.

crippling compensatory and punitive damages may be imposed. Since Syncor operates pharmacies in thirty-one states, the uncertainty is compounded by the prospect that such judicially imposed safety standards will vary from state to state.

While the decision by the Missouri Court of Appeals adversely affects all licensees, it may have a particularly significant impact on nuclear pharmacies such as those operated by Syncor. The introduction of tort liability for planned, low level emissions of radiation will cause increases in insurance rates and the insurance limits necessary for adequate protection. If these increases become sufficiently large, Syncor may be required to obtain more insurance than it can feasibly afford or acquire. If the decision below is permitted to stand, the possibly prohibitive costs of obtaining insurance may force independent nuclear pharmacies and hospital nuclear medicine departments to close their operations. Therefore, the decision below may threaten the very existence of Syncor and other end users of radiopharmaceuticals, with the corresponding curtailment of the manufacture and use of these products for the diagnosis and treatment of patients with serious, life-threatening diseases and injuries.

SUMMARY OF ARGUMENT

The decision of the Missouri Court of Appeals incorrectly applies the doctrine of federal preemption and permits the state by jury verdict to create its own radiation emission standards that may likely be more stringent than federally established standards, even though Congress intended that federal regulations completely occupy the field of nuclear safety.

The Missouri Court of Appeals incorrectly extended this Court's decision in *Silkwood v. Kerr-McGee Corp.*, 464 U.S. 238 (1984) to impose tort liability on facilities that are in full compliance with federal regulations. The *Silkwood* decision did not sanction state tort actions that

will impose more stringent emission standards than those established by the NRC.

The effect of the decision will be to allow juries who are unfamiliar with nuclear technology to set radiation emission standards on an *ad hoc* basis. These standards will conflict with standards set by the NRC, the federal agency with the expertise to establish standards in this technically complex field. Because standards created by juries on an *ad hoc* basis cannot be predetermined by licensed users of nuclear products, the industry will be faced with the prospect of having to pay potentially crippling damage awards or insurance premiums as a cost of doing business.

The Missouri Court of Appeals improperly overrides the important congressional policy of encouraging and promoting the nuclear industry's development. By permitting the imposition of potentially enormous tort liability, the decision of the court below will inhibit and perhaps preclude nuclear pharmacies from continued operations. The decision therefore effectively gives the state the power to prohibit the use of nuclear energy, even for critical medical and life-saving purposes, when Congress has decided that the benefits of nuclear technology are worth the risks.

REASONS FOR GRANTING THE WRIT

The Missouri Court of Appeals held that a federally licensed user of nuclear materials may be found liable for injuries allegedly caused by radiation emissions even where the levels of emissions are below the federal regulatory standards promulgated by the NRC. The court reached this result even though it acknowledged that imposing tort damages would effectively allow the state to set emission standards that might be lower than the federal standard. Pet. App. at 7a-8a. The decision therefore is inconsistent with the decisions of this Court precluding the states from setting their own safety standards

in light of federal preemption of this area. Review of the Missouri court's decision is necessary to protect the integrity of the federal regulatory scheme enacted by Congress in the field of nuclear safety.

I. THE DECISION BELOW EFFECTIVELY EMPOWERS THE STATES TO ESTABLISH THEIR OWN RADIATION EMISSION STANDARDS DESPITE FEDERAL PREEMPTION OF THE FIELD OF NUCLEAR SAFETY.

Except for very limited powers expressly ceded to the states, "the federal government has occupied the entire field of nuclear safety concerns. . . ." *Pacific Gas & Electric Co. v. State Energy Resources Compensation and Development Commission*, 461 U.S. 190, 212 (1983). Thus, Congress "prohibit[ed] the States from regulating the safety aspects of nuclear development. . . ." *Silkwood v. Kerr-McGee Corp.*, 464 U.S. 238, 250 (1984).

The federal preemption of nuclear safety includes the authority to set emission radiation standards. As the Joint Committee on Atomic Energy stated in connection with the Federal-State amendment to the Atomic Energy Act, Pub. L. 86-373, 73 Stat. 688, as amended, 42 U.S.C. § 2021:

> It is not intended to leave any room for the exercise of dual or concurrent jurisdiction by States to control radiation hazards by regulating byproduct, source, or special nuclear materials.[8]

1959 U.S. Code Congressional and Administrative News, v.2, p. 2879.

The authority to develop comprehensive nuclear safety standards was delegated solely to the NRC (and pre-

---

[8] The only authority the states have to regulate and license nuclear materials is delegated to them by the NRC through state agreements. See footnote 2 in Motion of Syncor.

viously to the Atomic Energy Commission) because it has superior technical expertise and is more qualified than any state agency in matters of nuclear safety. H.R. Rep. No. 1125, 86th Cong. 1st Sess., 3 (1959). Moreover, the NRC has the resources necessary to keep pace with the constantly changing technology of nuclear materials. The agency can charge advisory committees with investigating new technologies and employ experts to evaluate new and proposed safety measures. In addition, uniform nuclear safety standards can be more strictly enforced by a centralized federal agency than by state agencies, which may create standards varying from state to state. Since Congress intended for the nuclear industry to be as closely regulated as possible, safety standards set exclusively by the NRC would achieve that goal.

The decision of the Missouri Court of Appeals, by subjecting licensees to tort liability even if they comply with federal regulations, effectively permits states to set their own standards in the field of nuclear safety in a haphazard manner by courts and juries without technical expertise. It thus allows the states impermissibly to intrude in an area that Congress reserved to the federal government. Although the court reasoned that the imposition of common law tort liability does not impose requirements on licensees, because the licensees may choose between risking liability by not changing their behavior or attempting to negate the risk by lowering their emission rates, the court recognized that this reasoning "may appear to be disingenous and smack of sophistry. . . ." Pet. App. at 8a. Quite so. This Court has recognized that damage awards can serve to exercise regulatory control. *See San Diego Building Trades Council v. Garmon*, 359 U.S. 236, 247 (1959). The states should not be permitted to accomplish indirectly through the imposition of tort liability that which Congress prohibited them from doing directly.

The courts, to be sure, have held that there is a narrow exception to this broad federal preemption of the field of

nuclear safety and have allowed recovery of damages under state law.[9] This Court, too, has recognized this exception in *Silkwood v. Kerr-McGee Corp.*, 464 U.S. 238 (1984). Contrary to the Missouri court's reading of *Silkwood*, however, this Court did not sanction the imposition of tort liability even where the user of nuclear materials complied with federal standards. In *Silkwood*, the evidence introduced at trial showed that there had been an "unlawful" release of radioactivity and that the operator of the plant likely had violated federal safety standards. 464 U.S. at 243-44.

It is one thing to allow the imposition of common law tort liability where federal emission standards have been violated. Damages awarded against violators of the standards do not interfere with the federal standards but serve to complement and facilitate compliance with such standards. It is quite another thing to allow the imposition of state tort liability where the user of nuclear materials has complied with the federal standards. In the latter case, the states, not the NRC, become the arbiter of what are permissible emission standards. This would negate Congress' intent in preempting the field of nuclear safety. Thus, this Court should review the decision below to correct what in effect will become the states' preemption of federal authority in setting nuclear standards.[10]

---

[9] *See, e.g., McKay v. United States*, 703 F.2d 464, 468-69 (10th Cir. 1983); *Silkwood v. Kerr-McGee Corp.*, 667 F.2d 908 (10th Cir. 1981), *rev'd on other grounds*, 464 U.S. 238 (1984).

[10] Review by this Court is particularly necessary because at least one other state court relying on *Silkwood* has held that state tort actions are not preempted despite compliance with federal regulations. *Van Dissel v. Jersey Central Power & Light Company*, 476 A. 2d 310, 316 (N.J. 1984) (property damage action for damages allegedly caused by thermal pollution arising out of nuclear power plant cooling system not preempted even where no proof that facility operated in a manner not authorized, approved or licensed). In contrast, the Third Circuit in *Cipollone v. Liggett Group, Inc.*, Nos. 85-5073, 85-5074 (3d Cir., decided April 7, 1986), reached a

II. THE DECISION BELOW CREATES AN IRRECONCILABLE CONFLICT WITH FEDERAL NUCLEAR SAFETY STANDARDS AND FRUSTRATES THE GOALS AND OBJECTIVES OF THE ATOMIC ENERGY ACT.

In *Silkwood*, this Court also held that even if common law tort actions are not generally preempted, federal law might nonetheless preempt recovery under state law if "there is an irreconcilable conflict between the federal and state standards or [if] the imposition of a state standard in a damages action would frustrate the objectives of the federal law." 464 U.S. at 256. The tort action permitted by the Missouri Court of Appeals decision is preempted under both prongs of this test because the imposition of tort liability on a licensee complying with federal standards would wreak havoc on the comprehensive regulatory scheme established by the NRC and achieve a regulatory result Congress did not intend.

A. The decision of the court below would create an irreconcilable conflict with federal nuclear safety standards.

Unlike the *Silkwood* case, where imposing liability on violators of federal regulations may complement the regulatory scheme and facilitate compliance with federal law, the decision below will penalize facilities that emit radiation in accordance with federal law and will directly conflict with the regulatory system set in place by Congress.

As discussed in Part I above, Congress granted exclusive authority to the NRC to develop nuclear safety standards because it is more technically qualified than any state agency in matters of nuclear safety. The Missouri court's decision would have the perverse result of

---

different conclusion with respect to the Federal Cigarette Labeling and Advertising Act and held that the Act preempted state law damage actions that challenge either the adequacy of the warning on cigarette packages or the propriety of a party's actions with respect to the advertising and promotion of cigarettes.

effectively giving the authority to set safety standards not to the NRC or even to a state agency, but rather to state jurors who likely will be completely unfamiliar with nuclear technology.[11] A jury, by awarding damages against a licensee who meets federal standards, will effectively be establishing more stringent standards that may vary from case to case or state to state. These state standards will directly and unavoidably conflict with the uniform federal standards set by the NRC. The Missouri Court of Appeals assumes that industry would rather pay than comply with safety standards;[12] yet, the converse is true. The nuclear industry, including Syncor, would rather comply with requisite safety standards than pay jury awards. The Court should review the decision below to prevent the conflict with the federal standards that will be created as a result of the decision below.

B. The decision will frustrate the goals and objectives of the Atomic Energy Act.

In enacting the Atomic Energy Act, Congress chose to encourage private industry to develop peaceful uses for nuclear energy. However, in 1957, it became clear that simply lifting the federal government's monopoly on the development of atomic energy was not enough to induce companies to use nuclear technology. Private industry was reluctant to enter the field because of the potential for enormous liability. *Duke Power Company v. Carolina Environmental Study Group*, 438 U.S. 59, 63-64 (1978). Accordingly, Congress responded by amending the Atomic

---

[11] Justice Powell, in his dissenting opinion in the *Silkwood* case, recognized that lay juries have no competency to understand the highly sophisticated technology of nuclear facilities. 464 U.S. at 278.

[12] Specifically, the court below stated, "Mallinckrodt can continue to meet federal standards, and, if found wanting by state standards, simply pay the piper." Pet. App. at 8a.

Energy Act to include the Price-Anderson Act. 42 U.S.C. § 2210 *et seq.* This amendment limited the liability that could be imposed on private companies to $560 million dollars, provided government indemnification and empowered the NRC to require licensees to obtain insurance from private sources. In so doing, Congress again reaffirmed its determination that private industry should be encouraged to participate in the development of nuclear energy and that this justified the federal government's assuming some responsibility for damages arising from a catastrophic nuclear incident.

The federal radiation emission standard, "as low as is reasonably achievable," 10 C.F.R. § 20.1(c), reflects this same public policy decision. The regulation exists both to protect the public and also to permit the growth of the nuclear industry. Moreover, the federal regulations were adopted pursuant to the NRC's informal rulemaking process. *Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc.*, 435 U.S. 519, 55 L.Ed. 2d 460, 98 S. Ct. 1197 (1978). The public, including the respondents in this case, had the opportunity to participate in the NRC's rulemaking process and comment on the proposed radiation emission standards. Once issued in final form, these standards have the force of law.[13]

By permitting the imposition of either compensatory or punitive tort liability for low level radiation emissions regardless of compliance with federal standards,[14] the decision by the Missouri Court of Appeals contravenes

---

[13] Therefore, contrary to the opinion expressed by the Missouri Court of Appeals, these federal regulations are not merely guidelines for state law, Pet. App. at 11a, nor "standards adequate for administrative purposes in meeting governmental goals. . . ." Pet. App. at 10a.

[14] The Respondents seek compensatory and punitive damages in the amount of one billion dollars and injunctive relief.

the public policy decision made by Congress.[15] The practical result of the decision will be to force users of nuclear materials to pay substantial damage awards out of their own pockets or obtain sufficient insurance if they are to continue in business. Users such as nuclear pharmacies and hospital nuclear medicine departments, however, may not be able to afford or obtain sufficient insurance for all the potential liability claims involved.[16] At present, the insurance limits of nuclear pharmacies and hospital nuclear medicine departments are low because the potential for accidental contamination is smaller than for large nuclear facilities.[17] However, the insurance premiums for nuclear pharmacies and other similar users will undoubtedly rise to reflect the new potential liability imposed by the Missouri court. This increase will cause a price increase in radiopharmaceutical products with an adverse effect on patients. If the increase in premiums is large enough or if insurance becomes unavailable, these

---

[15] The Missouri Court of Appeals furthermore incorrectly suggests that states are free under the Atomic Energy Act to use or reject the use of nuclear energy. Pet. App. at 9a to 10a. In *Pacific Gas & Electric Co. v. State Energy Resources Commission*, 461 U.S. 190 (1983), this Court held that a state determination that nuclear power is not safe enough to be developed would impermissibly interfere with Congress' countervailing judgment.

[16] Under the Price Anderson Act, the NRC may require users of byproduct materials to obtain liability insurance covering injuries arising from nuclear incidents. 42 U.S.C. § 2210 *et seq.* To date, the NRC has not imposed such requirements on nuclear pharmacies and hospital nuclear medicine departments.

[17] Nuclear pharmacies and hospital nuclear medicine departments primarily use byproduct material having a half-life of no more than six hours. On the other hand, nuclear power plants use source material that may have a half life of up to 2000 years. Moreover, the prescription products dispensed by a nuclear pharmacy, which are intended to be injected or ingested are generally comparable to one chest x-ray. Thus, for example, the contamination that could occur in connection with an accidental contamination at a nuclear power plant or any other facility utilizing a nuclear reactor is vastly different from a similar accident at a nuclear pharmacy.

facilities may be forced to consider whether to curtail or halt the production of these drugs.[18]

Life-saving radiopharmaceutical drugs represent precisely the kind of peaceful use of nuclear energy that Congress intended to promote through the Atomic Energy Act.[19] The Missouri court's decision frustrates Congress' considered choice to encourage the safe use of nuclear energy and the comprehensive regulatory system designed to achieve Congress' objective. This Court should review the decision below to prevent this frustration of Congress' scheme.

---

[18] The liability crisis that is foreshadowed here has affected other industries as recent newspaper articles have reported. Reid, *The Liability Crisis*, The Washington Post, Feb. 23-25, 1986. Indeed, several bills have been recently introduced in Congress that propose various solutions to limit liability in civil cases so insurance will be affordable and available. S. 2046, 99th Cong., 2d Sess. (1986); H.R. 4385, 99th Cong., 2d Sess. (1986); H.R. 4460, 99th Cong., 2d Sess. (1986).

[19] In the statute itself, Congress stated that:

> Atomic energy is capable of application for peaceful as well as military purposes. It is therefore declared to be the policy of the United States that . . . the development, use, and control of atomic energy shall be directed so as to make the maximum contribution to the general welfare . . . .

42 U.S.C. § 2011.

CONCLUSION

For the foregoing reasons, Syncor International Corporation respectfully urges this Court to grant the petition for certiorari of Mallinckrodt, Inc.

Respectfully submitted,

ROBERT G. PINCO *
MICHAEL H. SELTER
ROBERT E. POKUSA
ANN K. POLLOCK
FINLEY, KUMBLE, WAGNER,
HEINE, UNDERBERG, MANLEY,
MYERSON & CASEY
1140 Connecticut Avenue, N.W.
Washington, D.C. 20036
(202) 659-8300
Counsel for Amicus Curiae
Syncor International Corporation

* Counsel of Record

May 19, 1986

MOTION FILED
MAY 19 1986

No. 85-1710

IN THE
Supreme Court of the United States
OCTOBER TERM, 1985

MALLINCKRODT, INC.,
Petitioner,

v.

SAMUEL F. BENNETT, *et al.*,
Respondents.

On Petition for a Writ of Certiorari to the Missouri Court of Appeals, Eastern District

MOTION FOR LEAVE TO FILE A BRIEF AS *AMICUS CURIAE* AND BRIEF OF THE AMERICAN COLLEGE OF NUCLEAR PHYSICIANS AS *AMICUS CURIAE* IN SUPPORT OF THE PETITION

REX E. LEE *
ELROY H. WOLFF
CARTER G. PHILLIPS
SIDLEY & AUSTIN
1722 Eye Street, N.W.
Washington, D.C. 20006
(202) 429-4000
Counsel for Amicus Curiae

* Counsel of Record

WILSON - EPES PRINTING CO., INC. - 789-0096 - WASHINGTON, D.C. 20001

IN THE

Supreme Court of the United States

OCTOBER TERM, 1985

No. 85-1710

MALLINCKRODT, INC.,
Petitioner,

v.

SAMUEL F. BENNETT, *et al.*,
Respondents.

On Petition for a Writ of Certiorari to the Missouri Court of Appeals, Eastern District

---

MOTION OF THE AMERICAN COLLEGE OF NUCLEAR PHYSICIANS FOR LEAVE TO FILE A BRIEF AS *AMICUS CURIAE* IN SUPPORT OF THE PETITION

The American College of Nuclear Physicians ("College") hereby requests, pursuant to Rule 36 of the Rules of this Court, leave to file the accompanying brief as *amicus curiae* in support of petitioner.* The *amicus* College is an organization of approximately 1200 physicians who specialize in research into and the practice of nuclear medicine. Nuclear medicine involves the use of ionizing and non-ionizing radiation by physicians in at-

---

* Pursuant to Rule 36, *amicus* has obtained the written consent of the petitioner, but was denied consent to file by respondents. Petitioner's letter of consent has been filed with the Clerk of the Court.

tempting to diagnose various illnesses. See N. Alazraki & F. Mishkin, *Fundamentals of Nuclear Medicine* 3-15 (1984). Because the diagnostic techniques employ the use of radioactive materials, the College's members who employ these techniques do so under license issued to them or to the facilities where they practice by the Nuclear Regulatory Commission ("NRC") or its designate and they must comply with numerous stringent federal requirements for such uses of radioactive materials. See 10 C.F.R. parts 31 and 35 (1985). This case raises the basic issue of the extent to which compliance with NRC safety standards precludes a state tort suit based on alleged radiation injury. The *amicus* College believes that the Court, in deciding whether to grant the petition, would benefit from the views of the College whose members must operate under the potentially varying safety standards embodied in both the federal regulatory scheme and state tort law.

For the foregoing reasons, the *amicus* College's motion for leave to file a brief in support of petitioner should be granted.

Respectfully submitted,

REX E. LEE *
ELROY H. WOLFF
CARTER G. PHILLIPS
SIDLEY & AUSTIN
1722 Eye Street, N.W.
Washington, D.C. 20006
(202) 429-4000
Counsel for Amicus Curiae

* Counsel of Record

May 19, 1986

QUESTION PRESENTED

Amicus Curiae will address the following question:

Whether a state tort action is preempted by the Atomic Energy Act, 42 U.S. § 2011 *et seq.*, when the complaint, as construed by the state court, admits that the defendant operated in full compliance with all relevant safety standards established by the Nuclear Regulatory Commission.

TABLE OF CONTENTS

	Page
QUESTION PRESENTED	i
TABLE OF AUTHORITIES	iv
INTEREST OF *AMICUS CURIAE*	1
STATEMENT	4
REASONS FOR GRANTING THE PETITION	6
CONCLUSION	10

TABLE OF AUTHORITIES

Cases: Page

Chicago & N.W. Transportation Co. v. *Kalo Brick & Tire Co.*, 450 U.S. 311 (1981) 9
Cipollone v. *Leggett Group, Inc.*, No. 85-5073 (3d Cir. Apr. 2, 1986) 10
Elsworth v. *Beech Aircraft Corp.*, 37 Cal. 3d 540, 208 Cal. Reptr. 874, 691 P.2d 630 (1984) 9
Fidelity Federal Savings & Loan Ass'n v. *De La Cuesta*, 458 U.S. 141 (1982) 8
Florida Lime & Avocado Growers, Inc. v. *Paul*, 373 U.S. 132 (1963) 8
Hines v. *Davidowitz*, 311 U.S. 52 (1941) 8
Nappe v. *Anschelewitz, Barr, Ansell & Bonello*, 97 N.J. 37, 477 A.2d 1224 (1984) 10
Pacific Gas & Electric Co. v. *State Energy Resources Conservation & Development Comm'n*, 461 U.S. 190 (1983) 7
Pennsylvania R. Co. v. *Clark Bros. Coal Mining Co.*, 238 U.S. 456 (1915) 9
Ray v. *Atlantic Richfield Co.*, 435 U.S. 151 (1978) 8
San Diego Building Trades Council v. *Garmon*, 359 U.S. 236 (1959) 8
Silkwood v. *Kerr-McGee Corp.*, 464 U.S. 238 (1984) 6

Statutes and Regulations:

42 U.S.C. § 2011 *et seq.* 2
42 U.S.C. § 2051(a)(3) 4
42 U.S.C. § 2051(d) 4
42 U.S.C. § 2134(a) 4
42 U.S.C. § 2210 *et seq.* 7
10 C.F.R. Parts 31 and 35 (1985) 2
10 C.F.R. § 31.11(a)(1)-(7) 4
10 C.F.R. § 35, 14(b)(4)(iii) 5
10 C.F.R. Part 20 5

Miscellaneous:

Alazraki, N. & Mishkin, F. *Fundamentals of Nuclear Medicine* (1984) 3

TABLE OF AUTHORITIES—Continued

Page

Report of the Tort Policy Working Group on the Causes, Extent and Policy Implications of the Current Crisis in Insurance Availability and Affordability (Feb. 1986) 2

Upton, *The Biological Effects of Low-Level Ionizing Radiation,* 246 Scientific American 41 (1982) 3

IN THE

Supreme Court of the United States

OCTOBER TERM, 1985

No. 85-1710

MALLINCKRODT, INC.,
Petitioner,

v.

SAMUEL F. BENNETT, *et al.*,
Respondents.

On Petition for a Writ of Certiorari to the Missouri Court of Appeals, Eastern District

---

BRIEF OF THE AMERICAN COLLEGE OF NUCLEAR PHYSICIANS AS *AMICUS CURIAE* IN SUPPORT OF THE PETITION

INTEREST OF *AMICUS CURIAE*

The American College of Nuclear Physicians ("College") is a non-profit, Illinois corporation which was created in 1974 to foster the highest standards in nuclear medicine, to advance the science and practice of nuclear medicine and to promote the continuing competence of practitioners of nuclear medicine. The College has approximately 1200 members who practice nuclear medicine or conduct research in that discipline. Those members who handle nuclear materials do so pursuant to a license issued by the Nuclear Regulatory Commission or its designate and must comply with strict and extensive

federal regulations concerning the use of various radioactive materials in the diagnosis of illness. 10 C.F.R. parts 31 and 35 (1985).

In this case the petitioner, a producer of radiopharmaceuticals [1] which is licensed by the NRC, has been sued by a class of plaintiffs who allegedly have worked in the vicinity of one of petitioner's plants. The Missouri Court of Appeals has held that this tort action is not preempted by the Atomic Energy Act of 1954, 42 U.S.C. § 2011 *et seq.*, and its implementing regulations, even though under state law the complaint clearly fails to allege that petitioner violated any NRC regulation in causing respondents' alleged exposure to radiation.

This decision will directly and adversely affect the *amicus* College and its members in two ways. First, the decision will almost certainly drive most producers of radiopharmaceuticals away from this business. Very few companies will be prepared to risk exposure to billion dollar lawsuits which must be defended even if the manufacturer is in full compliance with a comprehensive federal regulatory scheme. What is even more likely is that no insurer will be willing to issue a liability insurance policy for conduct that can give rise to claims of such magnitude even though the conduct satisfies federal safety standards. See *Report of the Tort Policy Working Group on the Causes, Extent and Policy Implications of the Current Crisis in Insurance Availability*

---

[1] Radiopharmaceuticals are made up of radioactive materials (a radionuclide) and a pharmaceutical which in combination allow for tailoring the chemical to permit tracing or therapy of a specific organ or other part of the body. *Fundamentals of Nuclear Medicine* at 12. Thus, petitioner's products can be developed to allow specialized imaging of the lungs, bone, liver, spleen, heart, brain and other vital parts. *Id.* at 13-14. Because of the special properties of radiopharmaceuticals for tracing bodily functions without disturbing their process they "provide a powerful diagnostic tool" for a host of serious disorders. *Id.* at 15.

and Affordability 6-15 (Feb. 1986) (documenting an existing insurance crisis). Thus, the effect of this decision will be to eliminate the supply of materials necessary for the practice of nuclear medicine, which in turn will jeopardize the health and lives of people whose illnesses can best be diagnosed by such techniques.

Second, assuming anyone is willing to continue producing radiopharmaceuticals, physicians who specialize in nuclear medicine, and who necessarily must expose people to radiation as part of their practice, will be seriously deterred both by the prospect of liability and the unavailability of insurance from continuing to practice nuclear medicine because of the potential for tort liability. This loss is unreasonable and unnecessary. The scientific evidence is overwhelming that the amount of radiation to which patients are exposed as part of this critical diagnostic function is *de minimis* compared to the level of radiation which occurs naturally. *Fundamentals of Nuclear Medicine* at 6; Upton, *The Biological Effects of Low-Level Ionizing Radiation*, 246 Scientific American 41, 42 (1982). Nevertheless, without a "safe harbor" based on compliance with NRC standards, the future of nuclear medicine seems quite bleak. The real victims, of course, will be those patients who will lose access to these diagnostic techniques which in many respects are superior to other methods, particularly because they do not require surgery.

Unless the decision below is reviewed by this Court, the practice of nuclear medicine will almost certainly end in Missouri and, because of the legal principles underlying the state court's decision, the practice of nuclear medicine in other states will just as certainly be altered significantly. Accordingly, the *amicus* College wishes to present its views to the Court on this important issue.

STATEMENT

A. The NRC's Regulation of Nuclear Medicine

The Atomic Energy Act directs the NRC "to exercise its powers in such manner as to insure the continued conduct of research and development and training activities in the . . . (3) utilization of special nuclear material and radioactive material for medical . . . purposes." 42 U.S.C. § 2051(a)(3). At the same time the NRC is instructed "to protect health [and] to minimize danger to life or property . . . ." § 2051(d). In addition, 42 U.S.C. § 2134(a) provides:

> The Commission is authorized to issue licenses to persons applying therefor for utilization facilities for use in medical therapy. In issuing such licenses the Commission is directed to permit the widest amount of effective medical therapy possible with the amount of special nuclear material available for such purposes and to impose the minimum amount of regulation consistent with its obligations under this chapter to promote the common defense and security and to protect the health and safety of the public.

Pursuant to this authorization, the NRC has adopted extensive regulations controlling the use and disposition of nuclear materials used by members of the *amicus* College who are regulated directly or indirectly by the Commission for receipt of such materials for their practice or research. 10 C.F.R. parts 31 and 35. The NRC's regulations place very precise limits upon the amount of various types of radioactive materials that a licensee can possess. 10 C.F.R. 31.11(a)(1)-(7). There are also very specific limitations on how certain materials can be administered to the patient. For instance, a licensee is prohibited from administering "to patients of technetium-99m containing more than 1 microcurie of molybdenum-99 per millicurie of technetium-99m, or more than 5 microcuries of molybdenum-99 per administered dose, at the

time of administration." 10 C.F.R. § 35.14(b)(4)(iii). Thus, where safety requires, the NRC can and does impose extremely specific requirements on licensees. The regulations for licensees such as petitioners are similarly detailed for the protection of public health and safety. 10 C.F.R. part 20.

B. Facts of the Case

Respondents represent a class of plaintiffs who have worked adjacent to petitioner's radiopharmaceutical processing plant in Maryland Heights, Missouri, Pet. App. 1a. Respondents claim that they have received physical and mental health injuries due to exposure to radioactive emissions released from petitioner's plant, and seek recovery under a number of common law tort theories. *Ibid.* Respondents have not alleged that petitioner, in exposing them to radiation, ever violated any NRC safety requirements. Respondents claim that the class is entitled to one billion dollars in damages.

The Circuit Court of St. Louis County summarily dismissed plaintiffs' claims, stating that the court lacked subject matter jurisdiction over the claims and that plaintiffs failed to state a cause of action. Pet. App. 30a.

The Missouri Court of Appeals reversed. Pet. App. 1a-26a. Although the court had misgivings about the state of the pleadings concerning the issue of petitioner's compliance with NRC regulations, the court of appeals expressly decided the case on the assumption that petitioner has complied with all relevant NRC standards because respondents never alleged any such violation. *Id.* at 6a-7a. The court then held that compliance with federal law did not create a basis for preempting a state common law tort action. It reasoned that it was not impossible for petitioner to comply with both federal and state standards for nuclear safety. Petitioner "can continue to meet federal standards, and, if found wanting by state standards, simply pay the piper." *Id.* at 5a. The court conceded that this result appeared to be "dis-

ingenuous and smacked of sophistry" (*ibid.*), but nevertheless held that it felt compelled to reach this result by this Court's recent decision in *Silkwood* v. *Kerr-McGee Corp.*, 464 U.S. 238 (1984).[2]

REASONS FOR GRANTING THE PETITION

The holding of the state court, permitting a billion dollar lawsuit to proceed without any allegation that petitioner has violated, even technically, any federal safety standards has sent shock waves through the nuclear medical community, whose members must expose individuals to radiation as part of their medical practice. It is critical that groups such as the *amicus* College and its members obtain a final ruling now on the preemption issue posed in the petition so that they can either realistically seek a clearer statement of preemption from Congress or abandon or modify the socially valuable practice of nuclear medicine. This case presents the Court with a unique and compelling opportunity to clarify its prior decision in *Silkwood* v. *Kerr-McGee Corp.*, 464 U.S. 238 (1984), and to establish clearly whether entities which fully comply with the requirements of the NRC enjoy any protection from state tort laws based on claims of exposure to radiation. Accordingly, the Court should grant the petition for a writ of certiorari.[3]

---

[2] The Missouri Supreme Court denied petitioner's motion to transfer the case for review by that court. Pet. App. 29a.

[3] *Amicus* recognizes that this case is in an interlocutory posture, but that fact in this instance supports plenary review by this Court now rather than later. As we indicated previously, in the practice of nuclear medicine the amounts of radiation to which individuals are exposed, consistent with federal standards, are very small. Accordingly, the likelihood of there being any actual causal relationship between the radiation and alleged injuries is nil. Thus, defendants in these cases ordinarily should prevail, unless the fears of radiation arising from ignorance unduly influence the factfinder's determination. Thus, it is far from clear whether any final decision which poses the issue as clearly as this case does will come before the Court any time soon. In the interim, while the issue is

1. In *Silkwood* v. *Kerr-McGee Corp.* 464 U.S. 238 (1984), this Court considered whether punitive damages were an appropriate remedy in a state law tort action in which the company had violated NRC regulations and had failed to prevent the plaintiff from being exposed to plutonium. The Court reaffirmed its prior holding that "the federal government has occupied the entire field of nuclear safety concerns, except the limited powers ceded to the states." *Id.* at 249, quoting *Pacific Gas & Electric Co.* v. *State Energy Resources Conservation and Development Comm'n*, 461 U.S. 190, 212 (1983). At the same time, the Court held that Congress implicitly in the Atomic Energy Act and the Price-Anderson Act, 42 U.S.C. § 2210 *et seq.*, had generally ceded to the states the authority to apply their common law tort remedies at least in certain cases, including that one.

In describing its holding, the Court stated, "[i]t is difficult to believe that Congress would, without comment, remove all means of judicial recourse for those injured *by illegal conduct.*" 464 U.S. at 251 (emphasis added). In so holding, the Court seemed to have used the violation of the NRC's rules, making the conduct illegal, as a predicate for its preemption analysis. Based on that premise, the Court held that imposition of punitive damages in that action would not "frustrate the objectives of the federal law." *Id.* at 256. In so doing the Court emphasized the apparent narrowness of its decision—"We perceive no such conflict or frustration in the circumstances *of this case.*" *Ibid.* (emphasis added) In addition, the Court expressly stated that "[w]e do not suggest that there could never be an instance in which

---

litigated in the various states, the nuclear medical community will face potentially enormous litigation costs and potentially prohibitive insurance costs, even if insurance can be obtained at all. Because of the possibility of an aberrational result in tort litigation of the type represented by this case, as a practical matter, insurance coverage will disappear until the legal issue presented here is authoritatively decided by this Court.

the federal law would pre-empt the recovery of damages based on state law." *Ibid.*

The worthiness of this case for plenary review obviously depends in large measure on the intended scope of the Court's ruling in *Kerr-McGee.*[4] For several reasons *Kerr-McGee* should not apply to the situation posed in this case where no violation of federal law is alleged. First, the "disingenuousness" and "sophistry" of respondents' interpretation of *Kerr-McGee,* which so concerned the court of appeals, can be eliminated completely if state tort law is available only as a supplemental remedy for violations of federal safety standards. Even in that situation, the imposition of state tort liability will significantly affect how regulated entities handle nuclear materials and would likely cause most individuals to act well within federal limits to avoid the risk that a minor violation of federal law could give rise to significant tort liability, including punitive damages. But such an "interference" with federal regulation, which might otherwise warrant preemption,[5] clearly can be viewed as the "regulatory consequence . . . that Congress was willing to accept" which the Court identified in *Kerr-McGee.* 464 U.S. at 256.

Second, the Court stated in *Pacific Gas & Electric Co.* v. *Energy Resources Conservation and Development Comm'n,* 461 U.S. at 207, that "no role was left for the States" with respect to licensing for safety the "posses-

---

[4] At a minimum, the court of appeals erred in applying only the most narrow preemption doctrine—whether federal and state law impose inconsistent obligations—and in failing completely to consider whether the state tort remedy, as applied, would interfere with the full achievement of Congress' purposes in the Atomic Energy Act. Compare *Florida Lime & Avocado Growers, Inc.* v. *Paul,* 373 U.S. 132, 142-143 (1963) with *Hines* v. *Davidowitz,* 312 U.S. 52, 67 (1941). See *Fidelity Federal Savings & Loan Ass'n* v. *De La Cuesta,* 458 U.S. 141, 153 (1982).

[5] Compare *Ray* v. *Atlantic Richfield Co.,* 435 U.S. 151 (1978); *San Diego Building Trades Council* v. *Garmon,* 359 U.S. 236 (1959).

sion and use of nuclear material." The decision of the court of appeals has rendered this statement a nullity. Instead of federal preemption of the nuclear safety field, there is virtually no role left for the federal government.

With enormous liability and litigation costs as the ultimate sanction for all radioactive exposure, even that authorized by the NRC, federal safety standards will become irrelevant. Whatever ad hoc standards a judge or jury sets will become the only meaningful requirements. Of course, no users of nuclear materials, who, like members of the *amicus* College, must expose individuals to radiation can possibly know in advance what conduct on their part will be found actionable by a trier of fact. Thus, in place of the NRC's detailed requirements for the safe use of nuclear materials regulating the practice of nuclear medicine, the decision below will substitute an essentially standardless state tort system. The reasonableness of the physicians' actions will be judged by lay juries ill-equipped to make such judgments in an area as complex as radiation safety. Neither the Congress in the Atomic Energy Act nor the Court in *Kerr McGee* could have intended this result.

This conclusion is reinforced by the fact that in other areas where a federal agency has been delegated broad regulatory authority, this Court has held that compliance with federal standards precludes state damage actions. See *Chicago & N.W. Transportation Co.* v. *Kalo Brick & Tile Co.*, 450 U.S. 311, 326-327 (1981); *Pennsylvania R. Co.* v. *Clark Bros. Coal Mining Co.*, 238 U.S. 456, 469 (1915) (damages precluded absent a finding by ICC of illegality). Against this background it is reasonable to assume that the violation of the NRC's regulations was critical to the Court's ultimate holding in *Kerr-McGee.*

2. The court of appeals' reading of *Kerr-McGee* conflicts with the interpretations of this Court's decision by other state courts and jurists. For instance, in *Elsworth* v. *Beech Aircraft Corp.*, 37 Cal. 3d 540, 208 Cal. Reptr.

874, 691 P.2d 630, 635 (1984) (emphasis added), the California Supreme Court, in an opinion by Justice Mosk, argued that *Silkwood* stood for "the proposition that even if the federal government has entirely occupied the field of regulating an activity *a state may simultaneously grant damages for violation of such regulation.*" Similarly, in *Nappe* v. *Anschelewitz, Barr, Ansell & Bonello*, 97 N.J. 37, 477 A.2d 1224, 1237 (1984), a concurring justice reasoned that in *Silkwood* this Court "held that punitive damages under state law could be recovered for violation of nuclear energy regulations . . . ." Cf. *Cipollone* v. *Liggett Group, Inc.*, No. 85-5073 (3d Cir. Apr. 7, 1986) (claims for failure adequately to warn about cigarette smoking preempted by Federal Cigarette Labeling and Advertising Act).

These cases illustrate that the scope of *Kerr-McGee* is completely unsettled in the lower courts. In light of the legitimate uncertainty surrounding the proper interpretation of *Kerr-McGee* and given that the issue literally will determine the future of socially valuable practices, such as nuclear medicine, the Court should grant the petition and decide whether this is the "instance in which federal law would preempt the recovery of damages based on state law" which the Court anticipated in *Kerr-McGee*.

CONCLUSION

The petition for a writ of certiorari should be granted.

Respectfully submitted,

REX E. LEE *
ELROY H. WOLFF
CARTER G. PHILLIPS
SIDLEY & AUSTIN
1722 Eye Street, N.W.
Washington, D.C. 20006
(202) 429-4000
Counsel for Amicus Curiae

May 19, 1986

* Counsel of Record

MOTION FILED
MAY 19 1986

(6)

No. 85-1710

IN THE

Supreme Court of the United States

OCTOBER TERM, 1985

MALLINCKRODT, INC.,
Petitioner,

v.

SAMUEL F. BENNETT, *et al.*,
Respondents.

MOTION FOR LEAVE TO FILE AND JOINT BRIEF OF SOCIETY OF NUCLEAR MEDICINE, INC. AND AMERICAN NUCLEAR SOCIETY AS *AMICI CURIAE* IN SUPPORT OF PETITIONER

L. Manning Muntzing*
Robert J. Ross
James R. Shoemaker

Doub & Muntzing, Chartered
1875 Eye Street, N.W.
Suite 775
Washington, D.C. 20006
(202) 467-6460

Attorneys for Amici Curiae
SOCIETY OF NUCLEAR MEDICINE, INC.
AMERICAN NUCLEAR SOCIETY

Of Counsel:

James R. Heelan
Resident Counsel

AMERICAN NUCLEAR SOCIETY
555 N. Kensington Avenue
La Grange Park, IL 60525
(312) 352-6611

*Counsel of Record

CASELLAS PRESS INC. – 1717 K STREET NW WASH DC 20036 – 223-1220

24P

IN THE

Supreme Court of the United States

OCTOBER TERM, 1985

No. 85-1710

MALLINCKRODT, INC.,
Petitioner,

v.

SAMUEL F. BENNETT, *et al.*,
Respondents.

MOTION FOR LEAVE TO FILE AS *AMICI CURIAE* IN SUPPORT OF PETITIONER

The Society of Nuclear Medicine (the "Society") and the American Nuclear Society ("ANS") respectfully move pursuant to Rule 36.1. of the Rules of this Court for leave to file a joint brief as *amici curiae* in support of the Petition for Certiorari in the above captioned case. The Society and ANS make this motion because the respondents refused to provide their written consent to the Society and ANS to participate in this case as *amici curiae* in support of the petitioner, Mallinckrodt, Inc. The Society and ANS support Mallinckrodt's Petition for Certiorari asking this Court to review the decision of the Missouri Court of Appeals that the respondents' claims for monetary damages arising out of Mallinckrodt's operation of a radiopharmaceutical processing plant are not barred by the doctrine of federal preemption.

In support of this motion, the Society and ANS state as follows:

1. The Society is a not-for-profit organization of more than 10,000 members with career interests in the diagnostic and therapeutic uses of radiopharmaceuticals. The principal activity of the Society is the development and exchange of scientific information in the field of nuclear medicine among its members and the public for the benefit of the public in general. Many of the Society's members, or the institutions for which they work, are licensed by the Nuclear Regulatory Commission.

The ANS is a not-for-profit scientific and educational organization with 14,000 individual members, including nuclear scientists and engineers, and 250 organizational members, including electric utilities and other companies and institutions licensed by the Nuclear Regulatory Commission. The principal objective of the ANS is to advance engineering and science related to atomic energy. This objective is accomplished by encouraging research, disseminating information, sponsoring meetings devoted to scientific and technical papers, setting voluntary standards, and cooperating with government agencies, educational institutions, and other organizations having similar purposes.

2. This case is of major interest to the Society, the ANS, and their members. The decision of the Missouri court, if allowed to stand, could subject members of the Society and of the ANS, or the institutions for which their members work, to potential state tort liability for federally authorized activities carried on in the ordinary course of business and in compliance with federal standards. The effect of such liability could be that the Society's members and ANS's members, or the institutions for which they

work, will be forced to curtail or abandon their work in the field of atomic energy.

3. The motion of the Society and ANS should be granted because the Society and ANS will address the effect of the Missouri court's decision on the research, development and uses of atomic energy, such as nuclear medicine and electricity generation, in our social environment, and on the persons and educational and other institutions involved in the development and use of atomic energy, a perspective and interest not otherwise represented in this case.

Wherefore, the Society and ANS request that leave to file the proposed brief be granted.

Respectfully submitted,

L. Manning Muntzing*
Robert J. Ross
James R. Shoemaker

Doub & Muntzing, Chartered
1875 Eye Street, N.W.
Suite 775
Washington, D.C. 20006
(202) 467-6460

Attorneys for Amici Curiae

SOCIETY OF NUCLEAR MEDICINE, INC.
AMERICAN NUCLEAR SOCIETY

**Counsel of Record*

Of Counsel:

James R. Heelan
Resident Counsel

AMERICAN NUCLEAR SOCIETY
555 N. Kensington Avenue
La Grange Park, IL 60525
(312) 352-6611

May 19, 1986

TABLE OF CONTENTS

Page

MOTION FOR LEAVE TO FILE AS *AMICI CURIAE* i

TABLE OF AUTHORITIES v

INTEREST OF THE SOCIETY OF NUCLEAR MEDICINE AND THE AMERICAN NUCLEAR SOCIETY 2

REASONS FOR GRANTING THE PETITION 4

CONCLUSION 15

TABLE OF AUTHORITIES

Cases: Page

Duke Power Co. v. Carolina Environmental Study Group, Inc., 438 U.S. 59 (1978) 4

Johnston v. United States, 597 F. Supp. 374 (D.Kan. 1984) 13

Northern States Power Co. v. Minnesota, 447 F.2d 1143 (8th Cir. 1971), *aff'd*, 405 U.S. 1035 (1972) 6

Pacific Gas & Elec. Co. v. State Energy Resources Conservation & Dev. Comm'n, 461 U.S. 190 (1983) ..... 4, *passim*

San Diego Building Trade Council v. Garmon, 359 U.S. 236 (1959) 13

Silkwood v. Kerr-McGee Corp., 464 U.S. 238 (1984) 4, 6

Statutes:

Atomic Energy Act of 1954,

42 U.S.C. §2011 *et seq.* 4
42 U.S.C. §2011 5
42 U.S.C. §2012(g) 5
42 U.S.C. §2013(a) 5
42 U.S.C. §2013(b) 5
42 U.S.C. §2013(d) 5
42 U.S.C. §2013(e) 5
42 U.S.C. §2021 7
42 U.S.C. §2021(b) 7
42 U.S.C. §2021(g) 7
42 U.S.C. §2073 11
42 U.S.C. §2092 11
42 U.S.C. §2093 11
42 U.S.C. §2111 11
42 U.S.C. §2133 11
42 U.S.C. §2134 11

Page

Energy and Water Development Appropriations, Pub. L. No. 99-141, 99 Stat. 572 (1985) 9

Price-Anderson Act, 42 U.S.C. §2210 *et seq.* 5

Legislative Materials:

Department of Energy Fiscal Year 1987 Budget: Hearings on H.R. 2959 Before the Subcomm. on Energy and Water Dev. of the House Appropriations Comm., 99th Cong., 2d Sess. (1986) (Statement of Stanley J. Goldsmith, M.D. on behalf of the Society of Nuclear Medicine and the American College of Nuclear Physicians) 8

H.R. Rep. No. 99-307, 99th Cong., 1st Sess. (1985) 9

S. Rep. No. 870, 86th Cong., 1st Sess. (1959) 7

S. Rep. No. 296, 85th Cong., 1st Sess., *reprinted in* 1957 U.S. Code Cong. & Ad. News 1803 6

Administrative Regulations:

10 C.F.R. Parts 0-170 12
10 C.F.R. Part 20 ..... 12, 13
10 C.F.R. Part 30 11
10 C.F.R. Part 40 11
10 C.F.R. Part 50 11
10 C.F.R. Part 70 11
10 C.F.R. §20.1(c) 12
10 C.F.R. §20.2 11
10 C.F.R. §20.105(b) 12
10 C.F.R. App. B, Table II 12
40 Fed. Reg. 58,847 (December 19, 1975) 14
35 Fed. Reg. 18,385 (December 3, 1970) 12
25 Fed. Reg. 8595 (September 7, 1960) 13, 14

Page

Miscellaneous:

G. Tokuhata and E. Digon, *Cancer Mortality and Morbidity (Incidence) Around TMI* (1985) 14

G. Mazuzan and J. Walker, *Controlling The Atom: The Beginnings of Nuclear Regulation 1946-1962* (Berkeley: University of California Press 1984) 6, 7

Report of the President's Commission on the Accident at Three Mile Island 14

IN THE

Supreme Court of the United States

OCTOBER TERM, 1985

No. 85-1710

MALLINCKRODT, INC.,
Petitioner,

v.

SAMUEL F. BENNETT, *et al.*,
Respondents.

JOINT BRIEF OF SOCIETY OF NUCLEAR MEDICINE, INC. AND AMERICAN NUCLEAR SOCIETY AS *AMICI CURIAE* IN SUPPORT OF PETITIONER

The Society of Nuclear Medicine, Inc. ("Society") and the American Nuclear Society ("ANS") have filed a motion with this Court pursuant to Supreme Court Rule 36.1. for leave to file a joint brief as *amici curiae* in support of the Petition for Certiorari of Mallinckrodt, Inc., in the above captioned case. The Society and ANS filed their motion because the respondents refused to provide their written consent to the Society and ANS to participate in this case as *amici curiae* in support of the petitioner. As required by Rule 36.1., the Society and ANS are submitting this brief together with their motion.

INTEREST OF THE SOCIETY OF NUCLEAR MEDICINE AND THE AMERICAN NUCLEAR SOCIETY

The Society is a not-for-profit organization comprised of approximately 10,000 physicians, physicists, chemists, radiopharmacists, nuclear medicine technologists, and other professionals engaged in the medical uses of radioactive materials. The principal activity of the Society is the development and exchange of scientific information in the field of nuclear medicine among its members and the public.

The ANS is a not-for-profit scientific and educational organization with over 14,000 individual members, mainly nuclear scientists and engineers, and 250 organizational members, including electric utilities and nuclear laboratories. The ANS works to advance engineering and science related to atomic energy in the United States and abroad. To this end, the ANS engages in the dissemination of scientific and engineering information through publications, meetings, workshops, and conferences. In addition, the ANS encourages research in atomic energy, sets voluntary industry standards, and cooperates with government agencies, educational institutions, and other organizations involved in atomic energy activities.

The Society and ANS are interested in the present litigation because of the great impact that this case will have on the many members of the Society and of ANS who are licensed by the Nuclear Regulatory Commission (NRC), or who work for institutions licensed by the NRC, to carry on activities in the field of atomic energy, such as nuclear medicine, nuclear power generation, nuclear fuel fabrication, radioisotope production, radiopharmaceuticals manufacture, and research and development of new uses of

atomic energy. If the decision of the Missouri Court of Appeals is allowed to stand, the decision will establish a precedent that could subject members of the Society and of ANS, or the institutions for which their members work, to potential state tort liability for federally authorized activities carried on in the ordinary course of business in compliance with applicable federal standards for nuclear safety and radioactive emissions. Such potential liability could cause members of the Society and of ANS, or the institutions for which they work, to curtail or abandon their activities in the field of atomic energy. The Society and ANS believe that the federal government's pervasive regulation of radiological safety matters precludes state law tort actions for alleged radiological injuries against NRC licensees that operate in compliance with NRC safety standards.

The interests of the Society and of ANS in this case are congruent with the nation's interest. Both Congress and the Executive Branch have determined that the development and use of atomic energy for civilian applications are important to the nation, in that progress in the uses of atomic energy raises the quality of life, benefits the general welfare of the people of the United States, and strengthens national security. The Missouri court's opinion is inimical to national policy because it creates an obstacle to the continued development and use of atomic energy.

For these reasons, the Society and the ANS support the petitioner's request for this Court to review the decision of the Missouri Court of Appeals.

REASONS FOR GRANTING THE PETITION

A. Subjecting NRC Licensees to Tort Liability for Activities Carried on in Compliance with NRC Safety Standards Frustrates the Purpose and Objectives of the Atomic Energy Act and Affects Broad Public Policy Concerns.

The subjection of NRC licensees to state law tort actions for monetary damages when such licensees are operating in compliance with federal standards for radioactive emissions would frustrate one of the major purposes of the Atomic Energy Act of 1954, as amended, 42 U.S.C. §2011 *et seq.* (1982), and would affect broad public policy concerns. Congress enacted the Atomic Energy Act of 1954 to encourage private industry to participate in the development and utilization of the peaceful applications of atomic energy.[1] *E.g., Pacific Gas & Elec. Co. v. State Energy Resources Conservation & Dev. Comm'n,* 461 U.S. 190, 221 (1983); 42 U.S.C. §2013(d). *See also Silkwood v. Kerr-McGee Corp.,* 464 U.S. 238, 281 (1984) (Powell, J., dissenting); *Duke Power Co. v. Carolina Environmental Study Group, Inc.,* 438 U.S. 59, 63 (1978). In the Atomic Energy Act Congress declared that atomic energy is capable of application for peaceful purposes, and that

> (a) the development, use, and control of atomic energy shall be directed so as to make the maximum contribution to the general welfare, . . . and

[1]Peaceful uses of atomic energy include, among other uses, the use of radioactive materials for medical purposes, the use of enriched uranium or plutonium for electricity generation, and the use of radiation as a food preservative. The term "atomic energy" is used in this brief in a broad sense to include the various peaceful uses of radioactive materials.

> (b) the development, use, and control of atomic energy shall be directed so as to promote world peace, improve the general welfare, increase the standard of living, and strengthen free competition in private enterprise. 42 U.S.C. §2011.

These declarations demonstrate Congress' intent in the Atomic Energy Act to encourage the private development and use of the peaceful applications of atomic energy for the benefit of the people of the United States.

Congress also indicated in the Atomic Energy Act its desire for the federal government to promote the peaceful applications of atomic energy by assisting private industry in developing the atom's uses. The Act states that United States funds "may be provided for the development and use of atomic energy." *Id.* §2012(g). In addition, the Act states that the federal government shall provide "a program of conducting, assisting, and fostering research and development in order to encourage maximum scientific and industrial progress" in atomic energy applications. *Id.* §2013(a). In order to "encourage scientific and industrial progress," Congress also provided for the transfer from the federal government to private industry of "unclassified scientific and technical information and for the . . . dissemination, and declassification of Restricted Data", as defined in the Act. *Id.* §2013(b). Finally, Congress intended to promote the development of atomic energy on an international scale, by "mak[ing] available to cooperating nations the benefits of peaceful applications of atomic energy. . .". *Id.* §2013(e).

In 1957, Congress continued its efforts to promote the civilian development of atomic energy by passing the Price-Anderson Act, 42 U.S.C. §2210 *et seq.* (1982), in response to private industry's concern about potential

bankrupting liability associated with the possibility of a nuclear accident. *See Silkwood v. Kerr-McGee Corp.*, 464 U.S. at 279; S. REP. No. 296, *reprinted in* 1957 U.S. CODE CONG. & AD. NEWS 1803, 1816. The Price-Anderson Act provides a comprehensive scheme of insurance and indemnity protection for persons licensed to possess nuclear materials and to operate nuclear facilities. In addition to providing protection, and thus encouragement, to private industry, the Price-Anderson Act was also intended to protect the public by assuring compensation for persons who suffer personal injury or property damage as a result of a nuclear accident. *E.g., Silkwood v. Kerr-McGee Corp.*, 464 U.S. at 279.

In order to foster an environment conducive to private development of atomic energy, Congress preempted state regulation of atomic safety matters when it enacted the Atomic Enery Act. *See, e.g., Pacific Gas & Elec. Co.*, 461 U.S. at 206-212; *Northern States Power Co. v. Minnesota*, 447 F.2d 1143, 1147-1154 (8th Cir. 1971), *aff'd*, 405 U.S. 1035 (1972). Congress was concerned that the states lacked the experience and technical knowledge to regulate atomic energy matters intelligently and effectively. G. MAZUZAN & J. WALKER, CONTROLLING THE ATOM: THE BEGINNINGS OF NUCLEAR REGULATION 1946-1962 295 (Berkeley: University of California Press 1984) [hereinafter cited as CONTROLLING THE ATOM]. Therefore, Congress vested the Atomic Energy Commission (AEC), now the Nuclear Regulatory Commission (NRC), with exclusive authority to regulate atomic safety matters. *E.g., Pacific Gas & Electric Co.*, 461 U.S. at 212.

When some states began demanding a role in atomic energy regulation, the AEC and the Joint Committee on Atomic Energy in Congress became concerned that state regulatory efforts could conflict with federal regulation

and create confusion and other obstacles that would impair the development of atomic energy. *See* CONTROLLING THE ATOM, *supra,* at 300-302. The Joint Committee thus began considering legislation to define more clearly the respective roles of the federal government and the states in regulating atomic energy. *Id.* The result was a 1959 amendment to the Atomic Energy Act, which authorized the AEC to transfer by agreement some regulatory authority over nuclear materials to any state that adopted a suitable regulatory program. 42 U.S.C. §2021. *See also Pacific Gas & Electric Co.*, 461 U.S. at 205. Section 274(b) of the Atomic Energy Act, 42 U.S.C. §2021(b), authorizes states to assume certain regulatory control over radiation hazards associated with nuclear materials, but requires state radiation protection programs to be "coordinated and compatible" with NRC regulations. *Id.* §2021(g); S. REP. No. 870, 86th Cong. 1st Sess. 11 (1959). Thus, Congress intended that the limited regulatory authority assumed by states pursuant to a Section 274 agreement with the NRC should not conflict with federal regulation or impair the development of atomic energy. *See Pacific Gas & Electric Co.*, 461 U.S. at 208-209; 42 U.S.C. §2021(g); S. REP. No. 870 at 11.

The foregoing history of atomic energy legislation demonstrates Congress' strong intention in the Atomic Energy Act to encourage and promote development of the peaceful uses of atomic energy. If NRC licensees operating in full compliance with NRC radioactive emissions standards may be subjected to state tort liability for injuries and property damage allegedly caused by authorized emissions, the important purpose of the Atomic Energy Act of promoting the development of peaceful applications of atomic energy will be frustrated. Institutions and private companies that develop atomic energy applications and

put them to use for the public good will be discouraged from continuing their operations. Nuclear research institutions, producers of nuclear medicine products, hospitals that administer nuclear medicine, electric utilities that use nuclear power to serve their customers, to name only a few, may choose to curtail or abandon the development and use of atomic energy applications. Such an outcome would be counter to the Atomic Energy Act's express purpose of encouraging and promoting peaceful applications of atomic energy for the benefit of the United States by improving the general welfare, increasing the standard of living, and strengthening free competition in private enterprise.

Broad public policy concerns are at stake in this case. The use of atomic energy in the diagnosis and treatment of disease, the generation of electricity, and the improvement of agriculture are some of the great accomplishments of the atomic age. The Missouri court's ruling is inimical to the further development and use of atomic energy for these and other purposes. If the court's decision is allowed to stand, the potential multiplicity of lawsuits faced by persons and institutions in the field of atomic energy could impede and perhaps prevent further progress in the development and use of atomic energy for peaceful purposes.

Congress and the Executive Branch have determined that the development and use of atomic energy are in the national interest. Congress continues to fund the Department of Energy's (DOE) atomic energy programs. For fiscal year 1986, Congress appropriated $23.3 million for the DOE Nuclear Medicine Applications Program. *Department of Energy Fiscal Year 1987 Budget: Hearings on H.R. 2959 Before the Subcomm. on Energy and Water Dev. of the House Appropriations Comm.*, 99th Cong., 2d Sess. 1 (1986) (Statement of Stanley J. Goldsmith,

M.D. on behalf of the Society of Nuclear Medicine and the American College of Nuclear Physicians); *see* Energy and Water Development Appropriations, Pub. L. No. 99-141, 99 Stat. 572-576 (1985). In addition, Congress appropriated a total of $377,625,000 for DOE's civilian nuclear energy research and development programs in 1986. *See* H.R. Rep. No. 99-307, 99th Cong., 1st Sess. 39-55 (1985); Energy and Water Development Appropriations, Pub. L. No. 99-141, 99 Stat. 572-576 (1985). These programs include the Light Water Reactor Program, Advanced Reactor Research and Development, and the Water Cooled Breeder Reactor Program. Under these and other atomic energy programs, DOE works with scientific institutions and private industry to develop new and improved uses of atomic energy for nuclear medicine, electricity generation, and other purposes. This support in Congress and the Administration for atomic energy development, even during a period of severe federal budgetary constraints and cost-cutting measures, demonstrates that Congress and the Administration believe that progress in atomic energy applications is important to the nation.

Nuclear medicine has many significant applications, including diagnosis and evaluation of heart disease, cancer, infant disorders, Alzheimer's disease and mental disorders. Radiopharmaceutical producers such as the petitioner, Mallinckrodt, Inc., make possible the practice of nuclear medicine. There are only a few such producers in the United States.[2] If these producers are subjected to

[2]There are only a handful of radiopharmaceutical manufacturers in the United States. The major companies are:

AMERSHAM CORPORATION
2636 S. Clearbrook Drive
Arlington Heights, IL 60005

DU PONT COMPANY
Diagnostic Imaging Division
331 Treble Cove Road
No. Billerica, MA 01862

unlimited tort liability for radiation injuries allegedly caused by activities carried on in the normal course of business in compliance with stringent federal safety standards for radioactive emissions, the producers may be forced to abandon their operations. The liability risk and the cost of liability insurance may prove too great to permit these companies to continue producing radiopharmaceutical products, which are the tools of nuclear medicine. Without the products that these companies provide, hospitals and other institutions now practicing nuclear medicine will be unable to continue to offer their many diagnostic and therapeutic nuclear medical services. Research and development in the field of nuclear medicine may also be harmed by the lower court's ruling. Research institutions may be forced by the specter of unlimited tort liability to reduce or discontinue their work to identify and develop new and better medical uses for radioactive materials. This result would be devastating to the health and welfare of the people of the United States who have come to depend on the health care benefits that nuclear medicine provides.

The negative impact of the Missouri court's decision is not limited to the field of nuclear medicine. Every industry that uses radioactive materials for civilian applications is threatened by the court's decision. Electric utilities with nuclear power plants generating electricity for the nation,

---

MALLINCKRODT, INC.
Diagnostic Products Group
675 McDonnell Blvd.
P.O. Box 5840
St. Louis, MO 63134

MEDI-PHYSICS, INC.
4050 Lakeside Drive
Richmond, CA 94806

SQUIBB DIAGNOSTICS
P.O. Box 191
New Brunswick, NJ 08903

SYNCOR INTERNATIONAL CORPORATION
12847 Arroyo Street
Sylmar, CA 91342

CIS USA (manufacturers for SYNCOR)
1983 Marcus Avenue
Lake Success, NY 11042

hazardous waste managers treating and disposing of the nation's nuclear debris, institutions developing nuclear agricultural techniques such as food irradiation, and research facilities exploring better ways to use atomic energy in these and other endeavors will all feel the effects of the lower court's ruling. Without protection from unlimited tort liability arising out of activities carried on in compliance with federal safety standards for radioactive emissions, many of these industries may be forced to reduce or abandon their services to the public. Such a result would be counter to the national interest and detrimental to the welfare of the people of the United States.

B. Subjecting NRC Licensees to State Tort Liability When Such Licensees are Operating in Compliance With Federal Emissions Standards Conflicts With NRC Regulations and Imposes an Unnecessary Burden on the Atomic Energy Industry

Many members of the Society and the ANS are licensed by the NRC to possess nuclear materials or to operate nuclear facilities, and many other members are employed by licensed institutions or companies.[3] As a condition of their licenses, these licensees are subject to a stringent federal regulatory regime for nuclear safety.[4] Imposing state tort liability on NRC licensees that operate in compliance with this detailed and pervasive federal regulatory scheme con-

---

[3]The Atomic Energy Act of 1954 and implementing regulations contain detailed licensing requirements for persons engaged in the use of nuclear materials and the operation of nuclear facilities. *See* 42 U.S.C. §§2073, 2092, 2093, 2111, 2133, 2134 (1982); 10 C.F.R. Parts 30, 40, 50, 70 (1985).

[4]*E.g.*, 10 C.F.R. §20.2 (1985) (NRC radiation protection standards apply to all licensees).

stitutes unnecessary and burdensome state regulation of nuclear safety matters in conflict with NRC's nuclear safety standards.

The NRC requires its licensees to comply with extraordinary detailed regulations governing every aspect of nuclear health and safety.[5] NRC's regulations governing radiation exposure limits are of particular relevance to this case. These regulations, codified at 10 C.F.R. Part 20 (1985), protect nuclear workers and the general public from the effects of radiation by establishing limits on the dose of radiation and the amount of radionuclides that may be released on-site at a nuclear facility and off-site into the environment. Specific limitations on hourly and weekly radiation levels surrounding licensed facilities are set forth in 10 C.F.R. §20.105(b) (1985). Maximum permissible concentrations of radionuclides in the air and water outside of a licensed facility are set forth in 10 C.F.R. Appendix B, Table II (1985). Licensees must comply with these stringent safety standards in conducting licensed activities. 10 C.F.R. §20.2 (1985).

In addition to these specific radiation limits, Part 20 imposes a second level of protection for workers and the general public in 10 C.F.R. §20.1(c) (1985). This section requires licensees to make every reasonable effort to maintain radiation exposures and releases of radioactive effluents "as low as reasonably achievable" (ALARA). The ALARA concept is based on the fact that licensees generally keep exposures to radiation and releases of radioactive effluents well below the Part 20 limits. *See* 35 Fed.

---

[5]NRC's regulations governing the possession, use, processing, storage, transfer, packaging, and disposal of nuclear materials constitute an extensive regulatory scheme for nuclear health and safety. *See* 10 C.F.R. Parts 0-170 (1985).

Reg. 18,385 (December 3, 1970) (AEC comments on ALARA regulation). By requiring licensees to maintain exposure limits and effluent limits as low as reasonably achievable, the ALARA regulation helps to ensure that actual exposure and effluent levels are below the Part 20 limits.

NRC's radiation safety standards represent a conservative approach to radiation protection. *See, e.g.*, 25 Fed. Reg. 8595 (September 7, 1960). *See also Johnston v. United States,* 597 F. Supp. 374, 390-392, 423 (D. Kan. 1984). Scientific and medical evidence indicates that the lowest radiation exposure levels known to cause physical injuries are many times higher than the Part 20 limits. *See Johnston v. United States,* 597 F. Supp. at 390-392, 423. Thus, NRC's radiation safety regulations provide more than adequate protection for workers and the general public against health effects from radiation.

Subjecting NRC licensees who are operating in compliance with NRC radioactive effluent regulations to state tort liability constitutes the imposition of more stringent radiation protection standards than the standards required by NRC regulations. This Court has stated that "regulation can be as effectively asserted through an award of damages as through some form of preventive relief." *San Diego Building Trade Council v. Garmon,* 359 U.S. 236, 247 (1959). State law damages awards would permit juries to impose on licensees a "zero release" regulatory standard, since licensees could avoid the risk of liability only by eliminating all radioactive emissions from their facilities.

The NRC has determined that a zero release standard is unnecessary to protect public health and safety. *See* 10 C.F.R. Part 20. *See also Johnston v. United States,* 597 F.

Supp. at 390-392, 423. NRC's regulations contain a substantial "margin of safety" and are based on the recommendations of leading institutions that are authoritative in the field of radiation protection.[6] NRC's safety regulations have an excellent success record. Even the Three Mile Island accident, the most serious nuclear accident in U.S. history, has not had a significant effect on the physical health of individuals living and working near the reactor.[7] More stringent state standards would not only conflict with NRC's fully adequate standards, but would be completely unnecessary and burdensome to industry. Arbitrary state radiation standards imposed by juries would inject uncertainty and confusion into the nuclear regulatory system, since NRC licensees would be subjected to conflicting regulatory systems at the federal and state levels. Such a scenario would have a profound negative impact on the atomic energy industry, and on research and educational activities related to the industry.

---

[6] *See* 40 Fed. Reg. 58,847 (December 19, 1975) (10 C.F.R. Part 20 ALARA regulations are based on recommendations of International Commission on Radiation Protection); 25 Fed. Reg. 8595 (September 7, 1960) (10 C.F.R. Part 20 revisions containing "considerable margin of safety" are based on recommendations of National Council on Radiation Protection).

[7] *See* G. Tokuhata and E. Digon, *Cancer Mortality & Mobidity (Incidence) Around TMI* 24 (1985); *Report of the President's Commission on the Accident at Three Mile Island* 12 (1979).

CONCLUSION

The petition for a writ of certiorari to the Missouri Court of Appeals should be granted.

Respectfully submitted,

L. Manning Muntzing*
Robert J. Ross
James R. Shoemaker

Doub & Muntzing, Chartered
1875 Eye Street, N.W.
Suite 775
Washington, D.C. 20006
(202) 467-6460

Attorneys for Amici Curiae

SOCIETY OF NUCLEAR MEDICINE, INC.
AMERICAN NUCLEAR SOCIETY

**Counsel of Record*

Of Counsel:

James R. Heelan
Resident Counsel

AMERICAN NUCLEAR SOCIETY
555 N. Kensington Avenue
La Grange Park, IL 60525
(312) 352-6611

May 17, 1986